Report HCSD #79-001-B



MA07092

STRATEGY FOR INSTRUCTIONAL SYSTEMS DESIGN AND FORMATIVE EVALUATION

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July 1976

Final Report

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Prepared for:

UNITED STATES ARMY HEALTH SERVICES COMMAND (HSPA-A) Fort Sam Houston, Texas 78234



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READ INSTRUCTIONS BEFORE COMPLETING FORM REPORT DOCUMENTATION PAGE 2. GOVT ACCESSION NO PERIOD COVERED Final Report. Strategy for Instructional Systems Design and Jul 75 - Jul 76 Formative Evaluation . 6. PERFORMING ORG. REPORT TUMBER AUTHOR(a) B. CONTRACT OR GRANT NUMBER(a) Deloros H./Kucha/ Ph.D., LTC, ANC, USA PERFORMING ORGANIZATION NAME AND ADDRESS Health Care Studies Division (HSA-CHC) Academy of Health Sciences, US Army Fort Sam Houston, Texas 78234 11. CONTROLLING OFFICE NAME AND ADDRESS Jul **976** Commander, US Army Health Services Command ATTN: HSPA-A 651 Fort Sam Houston, Texas 78234

MONITORING AGENCY NAME & ADDRESS(If different from Controlling Office) 18. SECURITY CLASS. (of this report) Unclassified 18a. DECLASSIFICATION/DOWNGRADING 16. DISTRIBUTION STATEMENT (of thie Report) Approved for Public Release; Distribution Unlimited 17. DISTRIBUTION STATEMENT (of the obstract entered in Block 20, if different from Report) 18. SUPPLEMENTARY NOTES 19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Active Army; Medical; Education; Survey; Instructional Systems Design 20 ABSTRACT (Continue on reverse slds if necessary and identify by block number) The overall purpose of the study was to deal with the elements of a systems model for designing patient education modules in eight areas (hypertension,

diabetes, weight control, breast self-examination, vaginitis, family planning, child growth and development, and low back pain). The event identification of the system approach that was used consisted of: (1) topic selection; (2) task analysis; (3) development of behavioral objectives; (4) "real world" search for existing educational software; (5) evaluation of existing educational software;

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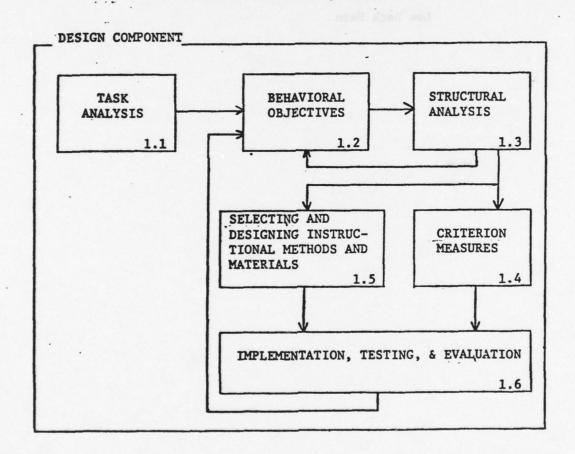
(6) development of criterion measures; (7) design of the instructional system; (8) formative evaluation; (9) data collection; (10) revision; (11) physician evaluation; (12) cost analysis; (13) and final staff evaluation. Examples are given for each of the eight patient education areas, in addition to the enlisted health educator's functions, system narratives, and data collection sheets.

Also addressed was the evaluation of several types of educational hardware used to carry the audiovisual presentations and the effectiveness of each.

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The overall purpose of this component of the Patient and Community Health Education (PACOMED) Study has been to deal briefly with the elements of a systems model for designing patient instruction. An attempt has been made to deal most saliently with the major characteristics of the model, i.e.; (1) it begins with the task analysis rather than with the statement of behavioral objectives; (2) the statement of behavioral objectives follows, and is in turn followed by, a step in which these objectives are sequenced; (3) instructional design is ultimately followed by the operation of the program and the collection of data (formative evaluation); and (4) the data are then fed back into the original design so that the system can be modified on the basis of its successes and/or failures.

# GRAPHIC SUMMARY OF THE DESIGN PROCESS



(Adopted from Kucha, Deloros H., Guidelines for Implementing An Ambulatory Consumer Health Information System: A Handbook for Health Education, Figure 11, p. 67.)

This process has been used to develop eight learning systems for the following subjects:

Hypertension

Diabetes Mellitus

Weight Control

Breast Self-Examination

Vaginitis

Family Planning

Child Growth and Development

Low Back Pain

### **ACKNOWLEDGEMENTS**

A great deal of time and effort has been expended by Colonel Lloyd McCabe, Commander, DeWitt Army Hospital, Fort Belvoir, Virginia 22060, and his staff to ensure the success of this portion of the study. The PACOMED staff can only offer a sincere and heartfelt "thank you".

It is with gratitude that the PACOMED staff acknowledges the guidance and assistance of Colonel Henry C. Reister, III, Chief, Family Practice Clinic, DeWitt Army Hospital and his staff, with whom PACOMED has worked with most closely, who together have seen us through three years of planning, developing, and evaluating. Their challenges, criticisms, and encouragement, coupled with their ready availability and long-suffering in the face of telephone calls, often at inopportune moments, have been of great help in overcoming hurdles and difficulties PACOMED encountered along the way during the formative evaluation phase of the project.

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STRATEGY FOR INSTRUCTIONAL SYSTEMS DESIGN AND FORMATIVE EVALUATION

### 1. INTRODUCTION.

# a. Purpose.

The purpose of this phase of the study was to use the resources of an increasingly sophisticated and effective educational technology and apply the science-based or science-derived concepts and techniques in a systematic way to the practical task of education for purposes of meeting the needs of the patient.

# b. Background.

The essence of the developmental phase is validating the learning systems until the patients who use the systems meet the learning objectives. Validation is an iterative process, not a single point for measuring success or failure. It is a formative evaluation; that is, it is part of the process of developing and improving the learning systems and the procedures for implementing them. The validation process (often called formative evaluation), if properly followed, will ensure that instruction works.

The most important single assumption made in this report probably will be the most difficult for people new to the ISD process to understand and accept: "The first tryout of a lesson or materials should reveal an abundance of errors; it should never pass with flying colors." If it sounds like this step in the ISD process is one in which one plans ahead to fail, this is true to a point. The necessity for producing inadequate instruction on the first trial is caused by a pecularity in the measurement process. While it is relatively easy to detect and revise instruction that only partially meets the requirements, it is virtually impossible to identify and revise instruction that exceeds the requirements. It is possible to identify too little instruction, but not possible to identify and quantify too much.

A thorough understanding of this point is essential to the correct application of the ISD process. The importance of this point is further emphasized by costs. It is far more expensive to try to eliminate portions of instruction that have already been developed and designed into the program than it is to add small amounts of additional instruction where it is found to be needed based on tryouts. 3

Popham, J. W., Educational Evaluation (Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1975), 20-44.

<sup>7,</sup> The Uses of Instructional Objectives: A Personal Perspective (Fearon Publishers, Belmont, California, 1973), 79-90.

<sup>&</sup>lt;sup>3</sup>TRADOC Pam 350-30, PHASE III, DEVELOP, Interservice Procedures for Instructional Systems Development, 1975, 280-288.

Very few, if any, health care professionals have the ability to look at instruction of any kind and tell whether it was produced by ISD or by a traditional process. This statement is extremely important because the typical method of examining or "inspecting" instruction is one of having "experts" look or listen to the instruction and then offer their personal opinion of its adequacy.

This is a difficult position to accept because many think of themselves as judges of "good" instruction—materials, films, etc.—and to be told that these judgments are not valid and reliable is a sort of slap in the professional face. Typically, health care workers and instructional developers have been taught and have come to accept the notion that if the patients did not learn, the patients were somehow at fault. That was a convenient rationalization. Unfortunately, it is no longer an acceptable excuse for failing. The people in the target population are the only people we have to work with, and if we are unable to teach them what they need to know in order to perform, the instruction is at fault and must be revised. The validation process is the method by which the health care workers and instructional developer makes instruction work. 4,5

# 2. OBJECTIVES.

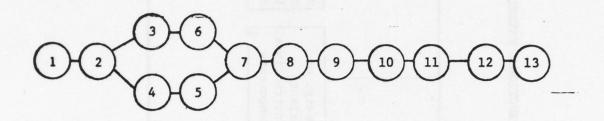
- a. The objectives for this phase of the study were:
- (1) To identify the problem (topic selection) and state terminal objectives,
  - (2) To conduct task analysis and describe entry behavior of patients,
  - (3) To develop performance objectives,
  - (4) To develop evaluation instruments,
  - (5) To determine instructional sequence
  - (6) To design or select instructional components.
  - (7) To produce or procure instructional materials, and
  - (8) To conduct formative evaluation.

<sup>\*</sup>Sanders, J. R. and Cunningham, D. J., "A Structure for Formative Evaluation in Product Development," <u>Review of Educational Research</u>, Vol 43, No. 1, Winter 1973, 217-236.

<sup>&</sup>lt;sup>5</sup>Baker, E. L., <u>Formative Evaluation of Instruction</u> (McCutchan Publishing Corporation, Berkeley, California, 1974), 533-585.

### METHODOLOGY.

- a. The purpose of this overview is to describe the steps used by the PACOMED staff in the systems approach to instructional design. Instructional design is a logical, step by step, preparation of the instructional strategy which, when validated, will teach pre-determined objectives.
- (1) The following is a diagram of the event identification and narration of the systems approach used.



Topic selection

2 Meeting with content consultant to ascertain tasks

(Task Analysis).

Development of behavioral objectives.

"Real World" search for existing educational software.

Evaluation of existing educational software.

Development of criterion measures.

Design of the instructional system.

Formative evaluation.

Data collection.

10 Revision.

11 Physician evaluation.

Cost analysis.

13 Final staff evaluation.

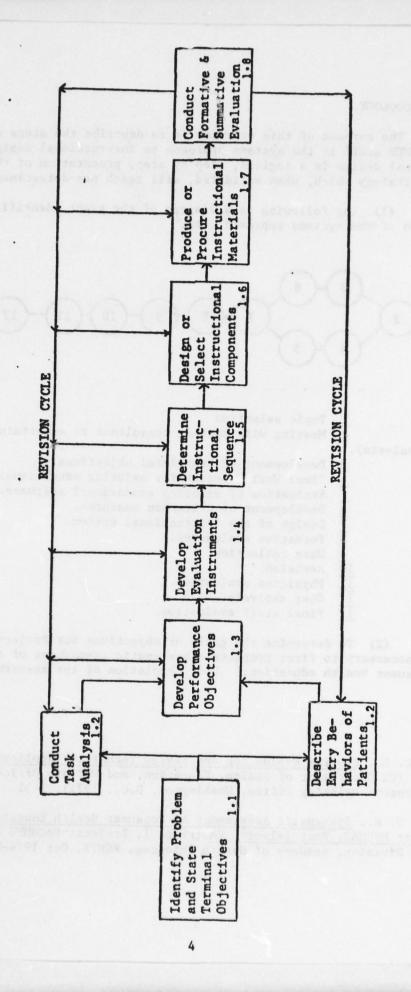
(2) To determine the goals or objectives for Project PACOMED it was necessary to first complete a systematic assessment of the needs for consumer health education. 7 Upon completion of the assessment, it

Cook, D. L., Program Evaluation and Review Technique: Application in Education (US Department of Health, Education, and Welfare Office of Education: US Government Printing Office, Washington, D.C., 1971), 1-31.

Kucha, D. H., Systematic Assessment of Consumer Health Education Needs of DeWitt MEDDAC, Fort Belvoir, VA (Phase 1, Project: PACOMED Health Care Studies Division, Academy of Health Sciences, FSHTX, Oct 1974-Mar 1975).

Figure 1

SYSTEMS APPROACH MODEL FOR DEVELOPMENT OF INSTRUCTIONAL MATERIALS



was determined by the Health Care Studies Division, Academy of Health Sciences, Fort Sam Houston, Texas, and the Ambulatory Care Division, Health Services Command, Fort Sam Houston, Texas, that Project PACOMED would develop and test the prototype systems for: Hypertension, Diabetes Mellitus, Weight Control, Family Planning, Breast Self-Examination, Vaginitis, Child Growth and Development, and Low Back Pain.

b. Procedures. Each instructional system was developed by first meeting with a content consultant (physician from Family Practice) to determine the tasks (task analysis). Restating tasks as behavioral objectives, and then specifying what behavioral objectives should be taught. The objectives were then arranged to insure that the instruction would be presented in the logical order (structural analysis).

# (1) Selection and Design of Media.

(a) Once the behavioral objectives were decided, a search was used to locate already available filmstrips, tapes, slides, or videotapes, that could be used for the different learning systems. This was to save additional production costs of materials already on the market that could teach the behavioral objectives. It was found that none of the commercial production houses actually tested their products for validity. Some reasons for the lack of validation were:

 $\underline{1}$  There was no monitoring agency that insured that the producers were accountable for their products.

 $\frac{2}{2}$  Consumers do not ask if the educational package was validated for a certain target population.

 $\underline{3}$  It was not feasible or profitable for the producers to do so.

(b) As the learning materials were previewed, they were measured against the behavioral objectives developed for each selected topic, i.e., Hypertension, Diabetes Mellitus, etc. It was soon apparent that very few commercial programs met the behavioral objective requirements of the individual topics. Furthermore, in many cases the instruction was not presented in a logical order.

Smith, R. G., Jr., The Design of Instructional Systems (Alexandria, Virginia: The George Washington University, Defense Documentation Center (AD 644054) Nov 1966), 21-27.

<sup>&</sup>lt;sup>9</sup>Kucha, D. H., Guidelines for Implementing An Ambulatory Consumer Health Information System: A Handbook for Health Education (Army-Baylor University Graduate Research Series, 1973), 60.

- (c) A number of these programs were purchased and modified for evaluation purposes only. Project PACOMED was a prototype study charged with evaluating the feasibility, practicality, and cost-effectiveness of the ISD technology approach to patient education and as with any designed study had limits on time, personnel, and money. Therefore, many of the programs used, were modifications of commercial scripts and filmstrips.
- (d) Once it was determined what learning tracks could be used/or modified, it was necessary to develop the scripts, visual presentations, and instructions for each topic selection. When the script was completed, it was recorded on an audio cassette and played while advancing the slides to test the pacing and to use audio cues to reinforce the learning. The slides were reviewed for accuracy of content and appropriateness to the sound track. The audio portion was then recorded by the staff announcer of the US Army Band at Fort Myer, Virginia. The slides were arranged in two slide trays so that they could be used in the television studio with alternating cameras. With the slides lined up and the sound track recorded, the program was then recorded on video tape at Walter Reed Army Medical Center's television studio.
- (e) The production of a program of this nature requires a very small team. The actual production consisted of two color television cameras and two carrousel slide projectors. The projectors provided the desired picture on a high luminescent screen and the "locked down" video cameras converted the pictures to video signals. The production of videotape was accomplished by alternating pictures from projector to projector and dissolving from picture to picture by use of a video switcher. This dissolve feature provided the viewer with a sense of motion rather than the static "clicks" of a filmstrip. The production time was short because there were no retakes due to talent error. The production crew consisted of one person to change slides, one person to run the audio portion, one engineer to watch the video signal and one person to operate the videotape recorders: a total production team of four people. The studio can be set up in thirty minutes and if all the advance work is completed correctly, each learning track can be completed in forty-five minutes, including a practice run-through for slide change and video switching familiarization.
- (f) While the learning tracks were being produced, the criterion measures (pre and post-tests) were written and the rest of the learning system was prepared.
  - (2) Implementation, Testing, and Evaluation.
- (a) Implementation was simply to make the instructional activities available to the patients in the order which had been prescribed. 10

<sup>10</sup> Corrigan, R. E. and Kaufman, R. A., Why System Engineering (Palo Alto, California, Fearon Publishers, Inc., 1966), 40-45.

- (b) Meaningful testing and evaluation must be based upon specific objectives of achievement from the course content. Tests developed from non-specific or non-definable learning objectives tend to show a very low correlation between the instructional content and the tests. I Testing may also entail measurement of attitudes and interests at various points along the way, or actual observations of behavior.
- (c) The same general considerations which go into the decision of what to include in a course also go into the decision of what to include in an evaluation of the course. The more completely evaluative procedures have been integrated into the overall instructional process, the more complete and more useful will be the evaluative data. More importantly, data will include assessments of performance of the objective, making it possible to determine if a particular competence or skill has been mastered, and if not, where the learning process failed.

# (3) Feedback and Iteration.

- (a) The step of feedback and iteration is a critical and distinctive feature of the instructional systems model. One of the short-comings of most current instruction is that the results of the process are not systematically collected and fed back to the designers for them to use to modify instructional activities and sequencing. It is uncommon to see the results of performance used as a basis for systematic refinement of instructional activity. Yet, performance reflects not only individual capability but also the efficacy of the patient information and management program. 12
- (b) Iteration means that the instructional activity will be carried out again, that is, the process will be repeated. It will not be repeated, however, until the total list of behavioral objectives, the sequence of those objectives, and/or the instructional activities for attaining those objectives have been altered in accordance with the evaluative data which have been fed back into the model. When this has occurred, a somewhat modified series of instructional activities will result, possibly sequenced in a different way and featuring perhaps more, perhaps fewer,

<sup>\*\*</sup>TWarrington, W. G., "An Item Analysis Service for Teachers," A Series of Special Reports of the National Council on Measurement in Education, Vol. 3, January 1972, Office of Evaluation Services, Michigan State University, 1-8.

<sup>12</sup>Kucha, D. H., The Design, Development, and Evaluation of An Empirical Model of An Outpatient Health Information and Management System (Unpublished Doctoral Dissertation, The Catholic University of America, 1973), 129-162.

behavioral objectives than the original. The repetition of instruction may occur during the next series of instruction for a different group of patients similar to those on whom the first trial was carried out. The second trial will then provide for a second testing and refinement of the sequence as specified. It is expected that the structure will stand up better the second time around, than it did the first. Each subsequent use of instructional materials could serve as an iteration or trial from which data could be obtained to use for modifying the instruction. See Figure 2, The Instructional Development Spiral.

# Figure 2

# THE INSTRUCTIONAL DEVELOPMENT SPIRAL

Feedback

Operation

Synthesis

SECOND ITERATION

Analysis

Feedback

Operation

Synthesis

FIRST ITERATION

Analysis

(Adopted from Kucha, Deloros H., <u>Guidelines for</u>
<u>Implementing An Ambulatory Consumer Health</u>
<u>Information System</u>, Figure 10, p. 66.)

(c) A point was reached when the model and the design had been refined to the extent that no further improvements were likely. At this point, the instructional package could be subjected to summative evaluation.

<sup>13&</sup>quot;Eight Steps in the Design of an Educational & Training System." Systems Approach to Education & Training, Project: ARISTOTLE, 8.

### 4. FINDINGS.

- a. The eight learning systems were tested on thirty subjects from each of the target populations. Revisions were made until the patients were passing the post-test at the eighty percent competency level, that is, the system was validated for an eighty percent competency level.
- b. Detailed description of development of each topic and evaluation are included:
  - (1) Hypertension, Appendix 1,
  - (2) Diabetes Mellitus, Appendix 2,
  - (3) Weight Control, Appendix 3,
  - (4) Breast Self-Examination, Appendix 4,
  - (5) Vaginitis, Appendix 5,
  - (6) Family Planning, Appendix 6,
  - (7) Child Growth and Development (0-3 Years of Age), Appendix 7,
  - (8) Low Back Pain, Appendix 8,
  - (9) Current Baseline Information and Cost Analysis, Appendix 9,
- (10) Enlisted Health Educator(s) Functions and Accompanying System Narratives for the Eight Topic Areas, Appendix 10, and
- (11) Evaluation Functions of the Health Educator(s) and Accompanying Data Collection Sheets for the Eight Topic Areas, Appendix 11.
- c. Three different types of educational hardware were used during the formative phase: 1) The Dukane filmstrip projector, 2) 3-M Sound on Slide, and 3) The video-tape cassette. Of these, the video-tape cassette was selected as the most practical for this program. The ease of operations, the ability to edit, the fact that it could be reversed to replay any part without loss of synchronization of sound and picture, low cost of reproduction, and the availability of video playback units in Army hospitals were all significant factors in it's selection.
- d. The process evaluation conducted during the formative stage showed high patient acceptance in the following areas: 1) Content value of the topics, 2) The Learning Laboratory Technicians' style, 3) The learning center, 4) Preference for the Audio-Visual mode, 5) More freedom to learn by Audio-Visual compared to usual instruction, and 6) Felt more personally responsible for learning by Audio-Visual compared to usual instruction by health workers.

### 5. DISCUSSION AND CONCLUSIONS.

The systematic assessment of patient and community health needs for MEDDAC at Fort Belvoir has been completed. The current baseline information and cost analysis of the eight topic areas, as well as the formative evaluation stage (validation of the individual learning systems) have been completed. While these phases can very well serve as prototype models (ideas brought to an engineering stage and directed toward a particular problem, patient education) it must be remembered that only partial judgment as to the system effectiveness and efficiency can be made. Only after the results from the comparative evaluation (Hypertension Protocol) and summative evaluation have been analyzed can full commitment to this innovation be made. It would be premature to accept an innovation without focusing further evaluation on the pre-installation process of the innovation:

- (1) Specifying the expected benefits of the innovation.
- (2) Judging the appropriateness of the innovation to the particular situation.
- (3) Verifying the presence of conditions essential to the effective use of the innovation.
- (4) Determining the necessary retraining of the non-professional and professional staff.
  - (5) Determining the required materials.
- (6) Anticipating the effects of the innovation on other aspects of the health care delivery system.
  - (7) Specifying necessary changes in the hospital organization.
- (8) Establishing a systematic procedure for introducing the innovation. 14,15,16

<sup>14</sup>Guba, E. G. and Horvat, J. J., "Concluding Note," The Role of Educational Research in Educational Change. Egon G. Guba, editor (Bloomington, Indiana, National Institute for the Study of Educational Change, 1967).

<sup>15</sup>Christiansen, J. E. and Taylor, R. E., The Adoption of Educational Innovations Among Teachers of Vocational Agriculture (Columbus, Ohio, Department of Agricultural Education, College of Agriculture and Home Economics, Ohio State University, 1966).

<sup>16</sup> Maguire, L. M., Observations and Analysis of the Literature on Change (Published by Research for Better Schools, Inc., June 1970).

- (a) A structure, which makes success possible, must be developed.
- (b) Leadership must be expected at the appropriate levels of management.
- (c) The professional/non-professional health care workers must participate and support the project.
- $\hbox{(d)} \ \ \mbox{Adequate resources must be provided throughout the implementation.}$

### 6. RECOMMENDATIONS.

- a. Proceed with the summative evaluation and additional types of documentation:
  - (1) Feasibility of a health learning center for a MEDDAC.
- (2) Development of the role of a para-professional as a health educator (91C, 91B, civilian LPN). During the formative evaluation phase the para-professional gained complete acceptance by the patient consumers. However, a professional staff development component has to be developed. After that, the feasibility of the para-professional's ability to approach the professional staff and have them voluntarily use the system for their patients has to be documented.
- (3) The patient consumer and staff response to the systems approach applied to educational methodology in a prototype patient education setting.
- (4) A record of the additional services that can be provided by a health education learning center, i.e., consultant functions, services to inpatients, collaboration with the health and environment section.
  - (5) Cost effectiveness analysis.
- b. The staff development component for summative evaluation will take approximately six months to develop because it involves teaching the non-professional health educators how to introduce change. Initially, one ambulatory clinic (Family Practice) will serve as the test bed to develop: 1) A change capability, 2) A viable change model, 3) Roles in change, 4) Patient referral system, 5) Patterns of patient flow, 6) Acceptance by staff of non-professionals functioning as health educators, and 7) Acceptance by staff of the patient education programs, etc.
- c. The project will accept patients from the other ambulatory clinics after the staff training is complete. The minimum time for full scale summative evaluation should be eighteen to twenty-four months.

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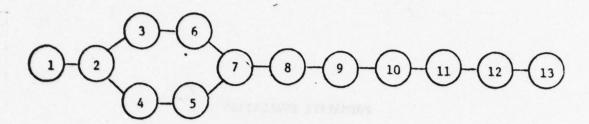
APPENDICES

# APPENDIX 1

FORMATIVE EVALUATION

Hypertension

# SUMMARY NETWORK OF INSTRUCTIONAL DESIGN FOR HYPERTENSION



# EVENT IDENTIFICATION

- 1. Topic Selected: Hypertension
- 2. Met with Content Consultant p. 19.
- 3. Develop Behavioral Objectives, p. 19.
- 4. Conduct "Real World" Search for Existing Educational Software on Hypertension, p. 19.
  - 5. Evaluate Existing Educational Software, p. 19.
  - 6. Write Criterion Measures (Pre-test Post-test), p. 19.
  - Design Instructional System. (See Instructional System for Hypertension p. 19.
  - Conduct Formative Evaluation, p. 20 (See Formative Evaluation Form, Incl 4.)
  - 9. Data Collection, p. 21.
  - 10. Revisions, p. 23.
  - 11. Conduct Physician Evaluation, p. 34.
  - 12. Cost Analysis, p. 34.
  - 13. Final Staff Evaluation, p. 34.

### 1. INTRODUCTION.

a. The following is a chronological representation of the systems approach to instructional design after the topic selection was made. Each event, as it appears in the Summary Network of the Instructional Design (p. 18), will be discussed in detail (Refer to corresponding numbers in the summary.) to give the proper perspective of the total developmental process.

# (2) Initial Contact With the Content Consultant.

(a) In June 1975, the Instructional Designer met with the Content Consultant to outline the behavioral objectives for the instructional learning system on Hypertension.

# (3) Behavioral Objectives.

(a) The hypertension behavioral objectives are statements of tasks that the patient will be able to perform upon successful completion of the learning system. The behavioral objectives developed for the Hypertension Instructional System are broken down into three separate sections: 1 Hypertension Objectives, 2 Low Sodium Diet, and 3 Medications. Refer to Inclosure 1, page 36, for a list of these objectives.

# (4) "Real World" Search.

(a) There was a limited selection of the materials dealing with hypertension. Three commercial filmstrips were selected for testing during the formative evaluation. It was necessary to develop learning tracks on Low Sodium Diet and General Medications to complete the learning system.

# (5) Existing Educational Software Evaluation.

(a) Evaluation of the existing educational software was conducted and documented on the Initial Staff Evaluation forms attached at Inclosure 2, a-c.

# (6) Criterion Measures.

(a) The criterion measures were written to determine the subject's entry level, (pre-test score), insure that the instruction taught the objectives (tasks the patient must master), and that the instructional system was effective (minimum of 80 percent competency level). See Inclosure 3.

# (7) Hypertension Instructional System.

(a) The following is a list of the forms necessary to administer the instructional strategy for Hypertension. These forms represent the paperwork actually encountered by each patient when s/he

was given the learning system. Each form, including the learning tracks, falls in the proper order of sequence. See Inclosure 3.

- a) Privacy Act Statement
- b) Demographic Data: Hypertension
- c) Hypertension Information (Pre-test)
- d) Hypertension Objectives
- e) Educational Intervention: Hypertension Information
- f) Hypertension Information (Post-test)
- g) Low Sodium Diet Information (Pre-test)
- h) Low Sodium Diet Objectives
- i) Educational Intervention: Low Sodium Diet
- 1) Low Sodium Diet Information (Post-test)
- k) General Medications Information (Pre-test)
- 1) Medications Objectives
- m) Educational Intervention: Medications
- n) General Medications Information (Post-test)

# (8) Formative Evaluation.

- (a) During the formative evaluation stage of Hypertension, the system was tested on a cross section of patients from the Family Practice Clinic. The Project Director and/or the Instructional Designer was present for each instructional session to evaluate the subject's reaction to the learning system. If the subject encountered learning problems during the presentation of the learning strategy, the difficulties were noted on the Formative Evaluation: Patient Version Form (See Inclosure 4) so that the necessary revisions could be made.
- (b) At the conclusion of the learning session, each subject was interviewed to obtain comments concerning his/her personal feelings about the program. Information is provided as follows:
  - What were the most difficult parts of the lesson? "Test questions were hard to understand."
  - What was the best feature of the instruction? "It was more complete than anything I have received before."
  - What was the worst feature of the lesson?
    No comments were obtained on this question.
  - (9) Data Collection.

The following is a compilation of demographic, test (pre-post), and process evaluation data.

- (a) Demographic Data.
- 1 A total of thirty individuals were used as subjects during the formative evaluation stage of Hypertension.

- Source Breakdown: All of the subjects used during this evaluation were obtained from the Family Practice Clinic.
- 3 Sex Breakdown: This evaluation was comprised of the following: 13 male subjects and 17 female subjects.
- $\underline{4}$  Age Breakdown: Three subjects were in the 26-35 year age group, eight from 36-45 years of age, twelve from 46-55 years of age, five from 56-65 years of age, and two subjects 65 years and above.
- <u>5</u> Occupation Breakdown: The occupation data is as follows: Five subjects were unemployed/retired, ten housewives, three administrative personnel, four non-medical professionals, one combat related military, two blue collar workers, two medical professionals and four classified as other.
- 6 Marital Status: The marital status information is provided as follows: 29 married and one separated subject.
- 7 Educational Level Data: Three subjects had a high school education, ll subjects had attended 1-3 years of college, eight subjects had obtained a Baccalaureate Degree, and eight subjects had obtained a Master's Degree.
  - (b) Pre and Post-test Data Collection.
- <u>1</u> There were 31 possible correct responses on the Hypertension Information Pre/Post-tests, 31 possible correct responses on the Low Sodium Information Pre/Post-tests, and 23 possible correct reponses on the General Information Pre/Post-tests. The results are as follows:

# a Hypertension Information.

- (1) Pre-test Score Range: Of the 30 subjects, the highest number of correct responses was 31 and the lowest number was two.
- (2) Post-test Score Range: Thirty-one was the highest number of correct responses and 22 was the lowest.
- (3) Total Scores -- Pre-test: 720 correct responses out of 930 possible points = 77 percent, the average percentage correct.
- (4) Total Scores -- Post-test: 846 correct responses out of 930 possible points = 90 percent, the average percentage correct.

# b Low Sodium Diet Information.

(1) Pre-test Score Range: The highest number of correct responses was 29 and the lowest number of correct responses was zero.

(2) Post-test Score Range: The highest number of correct responses was 31 and the lowest number was 20.

(3) Total Scores -- Pre-test: 582 correct responses out of 930 possible points = 63 percent, the average percentage correct.

(4) Total Scores -- Post-test: 839 correct responses out of 930 possible points = 90 percent, the average percentage

# c General Medications Information.

(1) Pre-test Score Range: The highest number of correct responses was 22 and the lowest number was one.

(2) Post-test Score Range: The highest number of correct responses was 23 and the lowest number was 20.

(3) Total Scores -- Pre-test: 570 correct responses out of 690 possible points = 82 percent, the average percentage correct.

(4) Total Scores -- Post-test: 666 correct responses out of 690 possible points = 97 percent, the average percentage correct.

(The average percentage scores were derived by dividing the total number of correct responses of the 30 subjects by the total possible points.)

# (c) Correct Response Analysis.

1 The pre and post-tests were evaluated to determine areas to be strengthened or revised. Each subject's test responses were listed according to the corresponding behavioral objective and criterion measure. See Tables 1-6, pages 24-29 , for the Correct Response Analysis-Pre-test and Post-test.

# (d) Process Evaluation.

The process evaluation measured the opinions toward the instructional strategy. The results are as follows: As a result of this learning experience, 26 subjects felt that they had misconceptions about hypertension. Four felt they had no misconceptions about hypertension. Twenty-two subjects felt that the learning experience clarified these misconceptions, and two felt that the learning experience did not adequately clarify the misconceptions. See Table 7, page 30, for the Tabulation of Process Evaluation Responses.

 $\frac{2}{\text{Evaluation Form for Hypertension.}}$  A synopsis of the comments obtained in this section are provided as follows:

<u>a</u> Physical Setting: "Very attractive." "Very nice."

b Health Educator: "Excellent."
"Makes subject interesting."

d Patient Education Programs: "Very interesting."

e Paperwork: "Too much."

f Patient Learning Concept: "Terrific."

g Other: No comments were obtained in this category.

# (10) Revisions.

(a) The first, second, and third version results of Hypertension Information Pre and Post-test results are shown on the Total Pre and Post-test Scores, Tables 8-10, pages 31-33.

 $\underline{1}$  Rationale for the Revision on the Pre and Posttests.

a Due to a number of mispronunciations, the audio and video-tapes had to be re-recorded. The General Medication script had to be modified to remove the portion that stated that medications could be carried in envelopes with the times to take the medication written on the envelope. This practice is not only discouraged, but illegal as well.

b The Low Sodium Diet script was modified to slow the pace of the script and to remove numbered categories such as "One, know your medications. Two ---." Instead, it reads, "Know your medications, know when to take them ...." Graphic reinforcement was added to aid the patient to remember that one teaspoon of salt contains 2,400 milligrams of sodium. A slide was added to the visual track to emphasize that monosodium glutamate has a high sodium content and would be listed on processed food packages.

 $\underline{c}$  It was necessary to clarify the meaning of some of the questions dealing with quantities of sodium, on the pre and posttests.

HYPERTENSION INFORMATION CORRECT RESPONSE ANALYSIS - PRE-TEST

	NUMBER OF INCORRECT	RESPONSES*	1	5	7	5	80	2	7	00	3	4	80	1	2	0	0	(3)	3	8	80	1	(0)	2	7	6	80	80	7	5	9	1			FOR MORE REINFORCEMENT
CORRECT RESPONSE ANALYSIS - PRE-TEST		RESPONSE ANALYSIS	++++++++++++++++++++++++++	+++++++++++++++++++++++++	+++-+-+++++++++++++	+-+-++++++++++++++++	+++-+-+-+-+-+-+-+-+-+-+-+	++++++++++++++++++++++++++	+++-++-++-++-	+-+-+-+-+-+-+-+-+-+-+-+-+	+ + +	-+-+++++++++++++	+ -	++++++++++++++++++++++++++++	+++++++++	+++++++++++++++++++++++++++++	++-+++++++++	+-+-++++++-+-+-+-+	+++++-++++++++++++++++++++	+-++++-+++++++++++++++++++	+-+-+++++++++++-+	++++++++++++++++++++++++	+-++++++++++++++++	+-++++++++++++++++++++++++++	+++++-++++++-+++++++++++++	+++++++++++++++++	+-+-+-++++++++++++++	+-+-++++-++++++++++++	+++++++++-++++++++++++++++	++-+++++++++++++++++++++++	+++++++++-+++-++-+++++	++++++++++++++++++++++++++	- = INCORRECT RESPONSE	- CORRECT RESPONSE	• CIRCLED AREAS INDICATE NEED FOR MORE
	CRITERION	(Incl 3-c)	1 +	+		+	+	2 +	+	+	+	3	+1	+1	4	5	+1	+	7 +	+1	+	00	6	10 +	11 +	+1	+1	+1	12 +	13 +	14 +	15 +			
`.	BEHAVIORAL OBJECTIVES		1					2				3			3	7	5		9			9	7	00	00				6	10	11	12			

\*RESULTS TABULATED ON THE PRE-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

IN THE INSTRUCTIONAL STRATEGY

HYPERTENSION INFORMATION

	NUMBER OF	INCORRECT	RESPONSES*	0	2	7	2	2	0	2	7	1	8	0	1	2	2	7	6	0	1	0	2	0	0	1	1	0	2	1	3	2	2	
CORRECT RESPONSE ANALYSIS - POST-TEST			RESPONSE ANALYSIS	+++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++	++-++++-++++++++++++++++++++++++	++++++++++++++++++++++++++++++++	++++++++++++++++++++++++++++++	++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++	+++-+++++-++++++++++++++++++++++	++++++++++++++++++++++++++++++++	+++++++++++++	+++++++++++++++++++++++++++++	++++++++++++++++++++++++++++++	+++-+++++++++++++++++++++++++++++++++++	+++-+-+++++++++++++++++++++++++++++	++++++++++++++++++	+++++++	+++++++++++++++++++++++++++++++++++++	+-++++++++++++++++++++++++++++++	++++++++++++++++++++++++++++	+++++++++++++++++++++	+++++++++++++++++++++++++++++++++++++	++++++++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++++	++++++++++++++++++++++++++++++++++++++	++++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++	++++++++++++++++++++++++++++	++++++++++++++++++++++++++++++	LONGUE BOLGEOGIA
	CRITERION		(Incl 3-f)	1	2	3	7	5				9	7	00	6			10		11	12	13			14				15					
	BEHAVIORAL	OBJECTIVES		1	1	2	3	4				4	3	9	7			80		6	10	10			11				12					

- = INCORRECT RESPONSE + = CORRECT RESPONSE ◆ = CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

\*RESULTS TABULATED ON THE POST-TEST INDICATED AREAS THAT NEED SPECIAL REVISION IN THE LEARNING STRATEGY.

THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

TABLE 3

NUMBER OF	INCORRECT	RESPONSES*	8	0	7	C D	(22)	020	7	5	3	8	7	6	3	6	7	9	9		00	23	1	23		00	(7)	<b>CD</b>	(II)	9	43	000	(ID	REINFORCEMENT	
CORRECT RESPONSE ANSLYSIS - PRE-TEST		RESPONSE ANALYSIS	+-+-+-++++++-+++-+-++++-++	+-++-+-+-+-+-+-+	+-++-+++++++++++++++++++++	++++	+	+++	+++++-++++++++++++++++++++++	++++++-++++++++++++++++++	+-++++-++++++++++++++++++++++	+-++-++++++++++	+++++++++++++++++++++	++++++-+++++++++++++++	+++++-+++++++++++++++++++++++	++-+++-+	+++++-++++++++++++++++++++++++	++++++++++++++++++++++++++++++	+-+++++++++-+-+++++++++++	++++++	+	+++-+-+-+-+-+-+-+-+-+-+-	+-+++-+-+++++++++++++++++++++++	+	++++-+-+-+-+-+-+-+-	++-+-+-+-+-+-+-+-+	+	++++++++	+-+-++-+-+-+-+-+-++++++-+-	+-++++++++++++++++++++++++	+-+-+++-+-+-+-+-+-+	+-+++++++-+-+-+++++-+-++	++++	- = INCORRECT RESPONSE + = CORRECT RESPONSE • = CIRCLED AREAS INDICATE NEED FOR MORE	IN THE INSTRUCTIONAL STRATEGY
CRITERION	pag.	(Incl 3-g)	1			2	9	7		2		9	7		00				0	10	11	12	13	14	15				16				17		
BEHAVIORAL	OBJECTIVES		1			2	2	3		4		4	2		9				7	000	6	10	11	12	13				14				14		

LOW SODIUM DIET

\*RESULTS TABULATED ON THE PRE-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

i.		NUMBER OF	INCORRECT	RESPONSES *	3	1	0	5	5	9	4	4	3	07)	2	2	9	3	0	0	2	2	0	1	2	2	1	1	2	5	7	2	1	2	1	
LOW SODIUM ET	CORRECT RESPONSE ANALYSIS - POST-TEST			RESPONSE ANSLYSIS	+++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++	++++++++++++++++++++++++++++++++++	+ - + + + + + + -   + + + + - + + + + +	+ + + + + - + + + + + + + + + + + +	-+++-+-+++++++++++++++++++++++	+ - + + + + + + + + + + + + + + + + + +	+ - + + + + + - +   + - + + - + + + + +	+ - + + + + + + + + + + - + + - + + + +	++++++++	+ - + + + + + + + + + + + - + + + + + +	+++++++++++++++++++++++++++++++++++++++	-+++-+++++++++++++++++++++	++-++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++	++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++	++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++	+-++++++++++++++++++++++++++	++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++++++++++	-+++++++++++++++++++++++++++++++++++++	++-+-++++++++++++++++++++++++++++++++++	+ - + - + + + + + -   + - + + + + + + +	+ - + + + + + + + + - + + + + + + + + +	+-+++++++++++++++++++++++++++++	+ - + + + + + + + + + + + + + + + + + +	+-++++++++++++++++++++++++++++++	
		CRITERION	MEASURES	(Incl 3-j)	1	2				e				4	2	9	7	80	6	10				11		12	13			14	15	16	17			
0		BEHAVIORAL	OBJECTIVES		1	1				2				3	4	5	5	9	7	00				∞		6	10			11	12	13	14			

\*RESULTS TABULATED ON THE POST-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

<sup>- =</sup> INCORRECT RESPONSE + = CORRECT RESPONSE • = CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

GENERAL MEDICATIONS
CORRECT RESPONSE ANALYSIS - PRE-TEST

NIMBER OF	INCORRECT	RESPONSES*	80	8	7	7	8	7	7	3	2	3	4	5	3	3	8	5	7	7	5	3	6	80	3	
		RESPONSE ANALYSIS	-++-+++	-+++-+-++++++++++	+++++++++-++-++-++++++++++	++-++++++++++++++++++++++	+-+-++++++++++++++	++++-++++++++++++	+++++-+++++++++	++++++++++++++++++++++++	+++++++++++++++++++++++++++++++	++-++++++++++++++++++++++++++++	++++-+++++++++++++++++++++++++	+++++++++++++++++++++++	+++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++++++++++	+++++-+++++++++++++++++++++	+++++++++++++++++++++++++++++++	+-+++++++++++++++++	++++++++	+++-++++++++++++++++++++++++++++++	++++++++-++++-+++++++++++++++	+++++++++++++++++++++++++++	++-++++++++++++++++++++++	++++++++++++++++++++++++++++++++	TOTAL MODERNIA
CRITERION	MEASURES	(Incl 3-k)	1	2	3	4			2			9					7	00		6	10		11	12		
BEHAVIORAL	OBJECTIVES		1	2	3	7			2			6 & 7					00	6		10	11		12	13		

- = INCORRECT RESPONSE

+ = CORRECT RESPONSE

- = CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

\*RESULTS TABULATED ON THE PRE-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

GENERAL MEDICATIONS

0RAL CRITERION  IVES MEASURES  (Incl 3-n)  +++++++++++++++++++++++++++++++++++	CRITERION MPASURES (Incl 3-n)  +++++++++++++++++++++++++++++++++++	The second secon	CORRECT RESPONSE ANALISTS - PUSI-1EST	
(Incl 3-n)  RESPONSE ANALYSIS  (Incl 3-n)  **PASURES**  *	(Incl 3-n)  RESPONSE ANALYSIS  (Incl 3-n)  +++++++++++++++++++++++++++++++++++	CRITERION		NUMBER OF
(Incl 3-n)  RESPONSE ANALYSIS  1	(Incl 3-n)  RESPONSE ANALYSIS  1	MEASURES		INCORRECT
\$ 7 \ \tag{2}   \qua	\$ 7 \ \tag{2}   \qua	- 1		RESPONSES*
\$ 7 \ \tag{2} \\ \frac{1}{4} \\ \frac{1} \\ \frac{1}{4} \\ \frac{1}{4} \\ \frac{1}{4} \\ \frac{1}{4} \\ \frac{1}{4} \\ \frac{1}{4} \\ \frac{1} \\ \frac{1} \\ \frac{1} \\ \frac{1}{4} \\ \frac{1}{4} \\ \frac{1} \\ \frac{1} \\ 1	6 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1	++++++++++++++++++++++++++++++	0
\$ 7 \ \therefore \there	\$ 7 \ \( \begin{array}{c} \begin{array}{		++-+++++++-+++++++++	3
\$ 7 \ 7 \ \tau \tau \tau \tau \tau \tau \tau \t	6 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	2	-++++++++++++++++++++++	3
6 7 7 7 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	6 7 7 7 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	3	+++++++++++++++++++++++	0
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δ 7 7 7 + + + + + + + + + + + + + + + +	\$ 7	7	+++++++++++++++++++++++	0
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\$ 1	\$ 10 \$ 4 + + + + + + + + + + + + + + + + + +		+++++++++++++++++++++++	1
\$ 10 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1 \$ 1	\$ 10 \$ 9 \$ \frac{1}{1} \frac{1} \frac{1}{1} \frac{1}{1	9	++++++++++++++++++++++	3
\$ 10 \$ \frac{1}{2} \frac{1} \frac{1}{2} \frac{1}{2} \frac{1}{2} \frac{1}{2} \frac{1}{2} \f	6 10 8 ++++++++++++++++++++++++++++++++++	7	+++++++++++++++++++++++++	0
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δ 10 9 ++++++++++++++++++++++++++++++++++	\$ 10 \$ \frac{1}{2} \frac{1} \frac{1}{2} \frac{1}{2} \frac{1}{2} \frac{1}{2} \frac{1}{2} \f		+++++++++++++++++++++++++	0
δ 10 9 ++++++++++++++++++++++++++++++++++	\$ 10 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		++-++++++++++++++++++++	1
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6 10 9 ++++++++++++++++++++++++++++++++++	δ 10 9 ++++++++++++++++++++++++++++++++++		+++++++++++++++++++++++++	0
6 10 9 ++++++++++++++++++++++++++++++++++	6 10 9 ++++++++++++++++++++++++++++++++++		+++++++++++++++++++++++++	0
6 10 9 ++-+++++++++++++++++++++++++++++++++	6 10 9 ++-+++++++++++++++++++++++++++++++++	00	-+++++-+++++++++++++++++++	2
10	10	6	++++++++++++++++++++++	3
10 ++++++++++++++++++++++++++++++++++++	10		+-+++-++++++++++++++++	3
10 ++++++++++++++++++++++++++++++++++++	10		+++++++++++++++++++++++++++++++++++++++	2
11 ++++++++++++++++++++++++++++++++++++	11 ++++++++++++++++++++++++++++++++++++	10	++++++++++++++++++++++++++++++	0
12 ++++++++	12 ++++++++++++++++++++++++++++++++++++	11	+++-++++++++++++++++++++++++	3
		12	++++++++++++++++++++++++++	2
			2 4 6 7 7 10 11 12	+ + + + + + + + + + + + + + + + + + +

+ = CORRECT RESPONSE

• = CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT
IN THE INSTRUCTIONAL STRATEGY

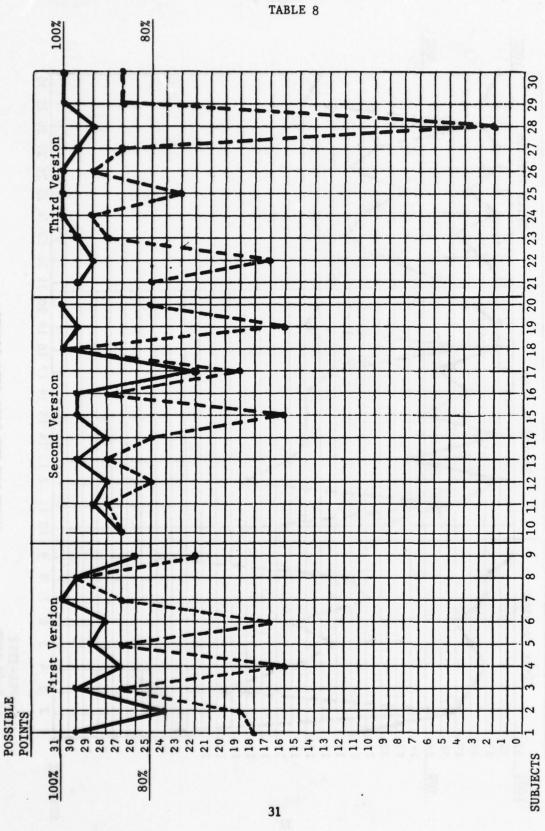
\* RESULTS TABULATED ON THE POST-TEST INDICATED THAT THERE WAS NO FURTHER NEED FOR REVISION IN THE LEARNING STRATEGY.

### TABLIATION OF PROCESS EVALUATION RESPONSES BYPERTENSION

ltem	CONTRACT COME PAGE		Opinion		
214	$\frac{0}{1}$	$\frac{3}{2}$	$\frac{24}{3}$	3 4	0
Viewing Time	Too Short		OK OK	-4-	Too Long
	0	$\frac{1}{2}$	$\frac{20}{3}$	64	3 -
Content Interest	Boring	2	OK	4	Fascinating
Questions on Topic	$\frac{0}{1}$	$\frac{0}{2}$	$\frac{16}{3}$	12	2 5
Augustona on repre	No Help		OK	Re	ally Helped
Pace	0 1	2/2	28	2/4	<u>0</u> 5
	Too Slow		OK		Too Fast
Content Uniqueness	$\frac{0}{1}$	$\frac{3}{2}$	$\frac{19}{3}$	64	<u>2</u> 5
	Old Stuff		OK		All New
Content Value	$\frac{0}{1}$	$\frac{0}{2}$	$\frac{15}{3}$	$\frac{12}{4}$	3 5
	No Value		OK	Mc	st Valuable
Learning Laboratory Technicians' Style	0 1	$\frac{0}{2}$	9 3	14	7 5
	Poor		OK		Excellent
Learning Center	$\frac{0}{1}$	$\frac{0}{2}$	11 0K	74	12 5 Excellent
	Poor		OK		Excellent
Preference for Instruction	$\frac{9}{1}$	$\frac{13}{2}$	$\frac{6}{3}$	$\frac{12}{4}$	<u>0</u> 5
	A/V Mode		Neutral	I.i	ve Teacher
Freedom to learn by A/V compared to usual	0 1	4/2	8 3	16	<u>2</u> 5
instructions	Less Freedom		Equal	M	lore Freedom
Personal responsibi- lities for learning by A/V compared to					
usual instruction by health workers	0 1	$\frac{0}{2}$	4/3	$\frac{23}{4}$	3 5
nearth workers	Less		Equal	-	More
Patient attitude toward A/V modes for	0 1	$\frac{1}{2}$	$\frac{22}{3}$	44	1/5
health education	Poor		OK		Excellent
Patient viewing of commercial TV in hours	3	$\frac{3}{2}$	7/3	13	<u>4</u> 5
during the day	Less Than		Hours		More Than

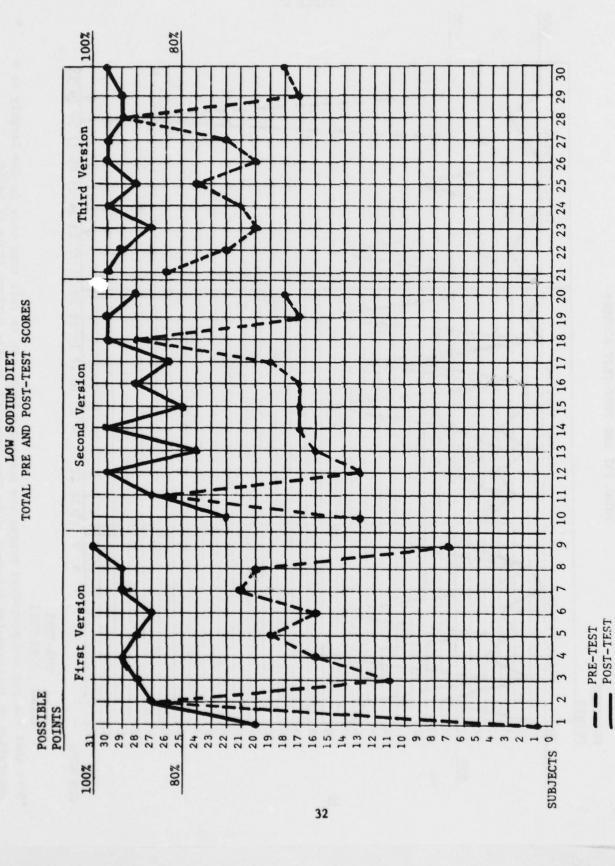
Tabulations Rating Scale



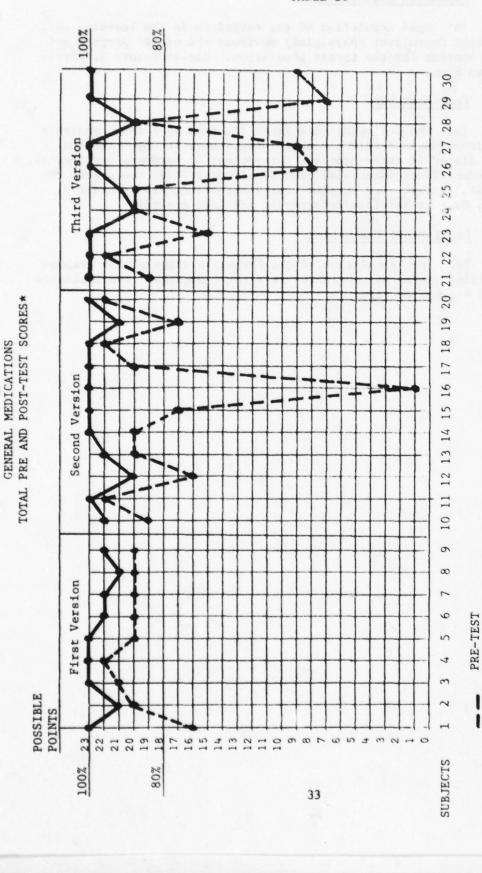


a \*Note that the pre and post-test scores are unusually high. It is felt that this is due largely to saturation of hypertension information in the community, by the various types of media. PRE-TEST POST-TEST

TABLE 9



C



largely to a saturation of hypertension information in the community, by the various types of media. \*Note that the pre and post-test scores are unusually high. It is felt that this is due

POST-TEST

#### (11) Physician Evaluation.

(a) Upon completion of the revisions in the learning strategy, the Content Consultant (physician) reviewed the entire program and evaluated the content for the target population. See Inclosure 5, Physician Evaluation Form.

#### (12) Cost Analysis.

(a) The following (See Table 11, page 35) is an analysis of the costs inherent in developing a learning system for Hypertension. The costs are listed in three separate categories; 1) hardware (equipment), 2) software (educational materials), and 3) administrative (salaries, reproduction costs, etc.). For further cost information, See Appendix 9, pages 462-464, Current Baseline Information and Cost Analysis.

#### (13) Final Staff Evaluation.

(a) Upon completion of the formative stage of the evaluation, the learning system was evaluated as a total package. See Inclosure 6, Final Staff Evaluation Form.

TABLE 11
HYPERTENSION COST ANALYSIS

	DEVELOPMENTAL AND INVESTMENT	RECURRENT
HARDWARE	COSTS (Price per Unit)	COST PER HCU
SONY Video Tape Recorder TV Monitor	\$884.30 487.00	\$0.147 .081
Headphones	13.68	.002
Listening Center	12.64	.002
DUKANE A/V Matic	236.00	.039
Maintenance	For each piece of equipment = 1¢/Unit Hour	.05
SUB-TOTAL	\$1,633.62	\$0.321*
SOFTWARE		
PACOMED Script (Advanced Organizer)	\$194.00	\$0.032
MEDFACT: General Info Hypertension	65.00	.011
PACOMED + BRADY: Low Sodium Diet	100.00	.016
PACOMED + BRADY: General Medications	100.00	.016
SUB-TOTAL	\$459.00	\$0.075*
TOTAL**		\$0.40
ADDITIONAL TRACKS		
MEDFACT: Weight Control Smoking	\$65.00 65.00	\$0.011*** .011***
ADMINISTRATIVE COSTS	<u> </u>	
Developmental	\$454.00	
Typing & Reproduction	132.00	
Paperwork to Individualize Strategy		\$0.09
SUB-TOTAL	\$586.00	\$0.09
TOTAL**	\$2,678.62	\$0.49

<sup>\*</sup>Cost per hour of educational hardware and software use remains a constant whether one patient, ten patients, or twenty patients are given the instruction.

<sup>\*\*</sup>Total costs rounded to the nearest cent.

<sup>\*\*\*</sup>Extra tracks to individualize as required, costs can be added as indicated.

INCLOSURE 1 Hypertension Objectives a - c

1

8

()

#### HYPERTENSIVE OBJECTIVES

- 1. Define blood pressure.
- 2. Define systolic pressure and diastolic pressure.
- Define hypertension and give some indication of the range of blood pressure in which it falls.
- 4. Define borderline hypertension and indicate the pressure range in which it falls.
- 5. List several diseases hypertension is directly related to.
- 6. Explain the implications of high blood pressure.
- 7. Tell whether hypertension is controllable with medication.
- Tell what the hypertensive patient's attitude toward overweight should be.
- 9. Tell what the hypertensive patient's attitude toward smoking should be.
- Tell what the goal of hypertension treatment is for the patient's health.
- 11. Explain why the doctor may require regular visits as part of the patient's treatment.
- 12. State what the hypertensive patient can look forward to with his disease under control.

#### LOW SODIUM DIET

- 1. Explain that sodium is a mineral found in salt.
- 2. Explain why salt intake should be reduced.
- 3. Explain in simple terms the effect of sodium on blood volume.
- 4. Explain the function of the kidneys in relationship to blood volume.
- 5. List at least two methods that may be used so the patient may eat the same food the family does.
- 6. List several foods or spices in which high concentrations of sodium are found.
- 7. Name several foods to avoid because they are heavily salted.
- Select from a sample menu foods that are low in sodium and can be eaten in restaurants and at food counters.
- 9. Select sample menus for making lunch to eat at school or work.
- 10. Describe the policy to follow on using salt substitutes.
- 11. Describe several ways to cover up the lack of sodium in the diet by using spices and herbs.
- 12. List several sources of recipes that may be used in preparing a low sodium diet.
- State the average number of sodium grams to eliminate from a simple low sodium diet.
- 14. Describe the adjustments that may need to be made if the doctor recommends a specific level of sodium each day.

#### MEDICATIONS

- Recognize from a complete list of medications, his/her medications and describe their use.
- 2. Explain the importance of taking medication as prescribed.
- 3. Recognize what rules the patient should follow when on medication.
- Explain the importance of and how to fill out a medication record sheet.
- 5. Explain the importance of not taking another persons medications.
- 6. Explain why medications should not be taken in front of children.
- 7. Explain why it is important to tell the physician about the medications the patient is taking that do not need a prescription.
- 8. Explain what effect alcoholic beverages can have on some medications.
- 9. Tell what to do with medications no longer being used.
- 10. Explain allergic reactions that may occur from prescribed medications.
- 11. Tell how many days medication the patient should have on hand prior to having the prescription refilled.
- 12. Tell why the patient should take his/her medication at the prescribed time.

#### INCLOSURE 2

Initial Staff Evaluation Forms
a - c

#### INITIAL STAFF EVALUATION FORM

SUBJECT Hypertension	TITLE Hyperte	nsion
WORKING TIME 15 Minutes	DATE PRODUCED	
FORMAT Filmstrip	DATE EVALUATED	25 Apr 1975
PRODUCER MedFact, Inc. Massillon, OH	PURCHASE/RENTAL	SOURCE Same
PRICE \$50.00  AVAILABILITY: CONTACT PRODUCER OR COORD  SYNOPSIS Explains that hypertension what systolic and diastolic	is not cured, but o	controlled. Explains what they mean.
INTENDED AUDIENCE: <u>General (Adult/High</u> OBJECTIVES <u>Met basic requirements of the second requirements</u>		ctives for Hypertensi
TECHNICAL ASPECTS:  SOUND: POOR FAIR x PHOTOGRAPHY: POOR FAIR x  SPECIAL STRENGTHS AND/OR WEAKNESSES To this filmstrip would need written objecti	GOOD E	EXCELLENT  In a learning system, and post-tests.
COULD THIS FORMAT WORK EFFECTIVELY BY ITS	SELF? Yes	ANDW TARREST STREET, NOT
EXPLAIN: With the forms mentioned above effectively.	ve, the filmstrip w	rould work quite
COULD THIS SUBJECT/FORMAT (PACKAGE) BEST INSTRUCTION?  YES	BE USED IN A SUPPL	EMENT TO OTHER
EXPLAIN:		

#### INITIAL STAFF EVALUATION FORM

SUBJECT: Hypertension	TITLE: General Medications
WORKING TIME: 15 Minutes	DATE PRODUCED: 1974
FORMAT: Booklet	DATE EVALUATED: June 1975
PRODUCER: Brady Co. Landover, MD	PURCHASE/RENTAL SOURCE Same
one patient education. Explains	OR COORDINATOR DIRECTLY.  st a nurse clinician or physician to give one on s the importance of keeping medication out of your medications and when to take them.
INTENDED AUDIENCE: General (A OBJECTIVES: Met Basic require hypertension.	Adult/High School) ements of the bahavioral objectives for
	R X GOOD EXCELLENT  SSES: Needs behavioral objectives, and pre &
COULD THIS FORMAT WORK EFFECTIVE	y - Missi en fisevitados anos removernos ara
INSTRUCTION?	AGE) BEST BE USED AS A SUPPLEMENT TO OTHER  X NO
EXPLAIN:	
POSITION: INSTRUCTIONAL DESIGN	

#### INITIAL STAFF EVALUATION FORM

	Hypertension	TITLE:	Sod	um Restr	lcted Diet
WORKING TIME	: 15 Minutes	DATE PRO	DUCED:	1974	
FORMAT:	Booklet	DATE EVA	LUATED:	1975	
PRODUCER:	Brady Co.	PURCHASE	RENTAL	SOURCE:	Same
	Landover, MD				
PRICE \$50.0	<u>o</u>				
AVAILABILITY	: CONTACT PRODUCER OR C	COORDINATOR DIRE	CTLY.		
SYNOPSIS: _	Explains the importance	of controlling	salt in	ake in re	elation to
	blood pressure. Explain	s how to read la	abels an	nd recogni	ize sodium
content in p	ackaged goods.				
INTENDED AUD	IENCE General (Adult/H	ligh School)			
OBJECTIVES:			oral ob	ectives f	For
Hypertension		ts of the benavi	JIAI OU	CC LIVES .	. 02
TECHNICAL AS					
SOUND: N/A	POORFAIR	GOOD	EXCELLI	ENT	
PHOTOGRAPH	Y: POOR FAIR x	GOOD	EXCELLI	ENT	
SPECIAL STRE	NGTHS AND/OR WEAKNESSES:	Needs behavio	oral ob	ectives,	and pre &
			learni	e program	
	o become an evfective pa	ert of the total	Tearnin	o propra	1 011
post-tests t hypertension	o become an evfective pa	art of the total	Tearmin		i on
hypertension	o become an evfective pa			., , , , , , , , , , , , , , , , , , ,	
hypertension	o become an evfective pa	3Y ITSELF? Yes			i on
hypertension	o become an evfective pa	3Y ITSELF? Yes			i on
hypertension	o become an evfective pa	3Y ITSELF? Yes			
hypertension	o become an evfective pa	3Y ITSELF? Yes			
COULD THIS F	o become an evfective pa	BY ITSELF? Yes	bove.		
hypertension COULD THIS F EXPLAIN: COULD THIS S	o become an evfective paragrams.  ORMAT WORK EFFECTIVELY E With the supplemental for  UBJECT/FORMAT (PACKAGE)	BY ITSELF? Yes	bove.		
hypertension COULD THIS F EXPLAIN: COULD THIS S	o become an evfective pa	BY ITSELF? Yes	bove.		
hypertension COULD THIS F EXPLAIN: COULD THIS S TION?	o become an evfective paragrams.  ORMAT WORK EFFECTIVELY E With the supplemental for  UBJECT/FORMAT (PACKAGE)	BY ITSELF? Yes	bove.		
hypertension COULD THIS F EXPLAIN: COULD THIS S	o become an evfective paragrams.  ORMAT WORK EFFECTIVELY E With the supplemental for  UBJECT/FORMAT (PACKAGE)	BY ITSELF? Yes	bove.		
hypertension COULD THIS F EXPLAIN: COULD THIS S TION?	o become an evfective paragrams.  ORMAT WORK EFFECTIVELY E With the supplemental for  UBJECT/FORMAT (PACKAGE)	BY ITSELF? Yes	bove.		
hypertension COULD THIS F EXPLAIN: COULD THIS S TION?	o become an evfective paragrams.  ORMAT WORK EFFECTIVELY E With the supplemental for  UBJECT/FORMAT (PACKAGE)	BY ITSELF? Yes	bove.		

#### INCLOSURE 3

ACTOR SCIENCE OF VIGORIA

Hypertension Instructional System Forms a - n

### PRIVACY ACT STATEMENT (5USC 552a)

 Authority for collection of information including Social Security Number:

Section 3012, Title 10, US Code.

2. Principal purposes for which information is intended to be used:

To assist medical research personnel in the monitoring of individual patient performance and in the evaluation of the PACOMED concept. The last four digits of the SSN identifies the patient and allows for computer consolidation, comparison, and retrieval of individual data, and cross reference with the outpatient record if required.

#### 3. Routine uses:

This information may be used in research pertaining to the planning and development of a prototype patient and community health staff education module; in the establishment of an objective and behavioral data bank; and in the development of appropriate medical instructional systems. Individual data may be used in analysis and discussion with other AMEDD personnel and consolidated in research reports for general release. No information that identifies any individual patient or physician will be released.

- 4. Providing of this information is voluntary but failure to provide will result in your exclusion from the research project.
- 5. The following forms are currently in use with this statement;

AHS Form 331	Demographic Data: Hypertension
Pre Test	Hypertensive Information
Pre Test	Low Sodium Diet Information
Pre Test	General Medications Information
Post Test	Hypertensive Information
Post Test	Low Sodium Diet Information
Post Test	General Medications
AHS Form 334	Demographic & Baseline Data: Hypertension
AHS Form 334b	Process Evaluation: Hypertension
AHS Form 334c	One Month Follow-Up Data: Hypertension
AHS Form 334d	Six Month Follow-Up Data: Hypertension
Scale	Rotter's I.E. Scale
Scale	Nelson-Denny Scale

Demographic Data: Hypertension

		- Parat Hypartenoron				
INSTRUCTIONS:	INSTRUCTIONS: Please answer each item by supplying the correct information. If you have any questions, do not hesitate to ask the health educator.					
FULL NAME:			5-344 SELECTION			
ADDRESS:		ante de ente de cuesta				
	(Street)	(City)	(State)	(Zip)		
TELEPHONE NUM	BERS: HOME					
	WORK					
1. Last four	digits of sponsor	's SSAN:	1 1 1	1 1		
2. Date:	etas na Sucarabit.					
3. Patient's		one of the following.	eye bagaina			
o. ractent s	status: (Circle o	one of the following.				
	Service Mem	ber Dependent				
4. Sponsor's	Rank/Status:	1				
5. Sex:		off parentage to eyes				
All to make the						
6. Age last b	oirthday:					
7. Occupation	1:					
3. Marital st	atus:					
	Married:	Engaged:	Jest acc			
	Widowed:	Divorced:	-			
	Single:	Separated:				
. Education	completed:					
		ntary School:				
		r High School:				

Demo	ographic Data: Hypertension
9.	Education completed: Cont'd  High School:  (9th - 12th grade)  1 - 3 Yrs College
	Baccalaureate Degree
	Master's Degree
	Doctor's Degree
10.	When were you diagnosed a hypertensive?
	Less than 3 mos.
	4 to 6 mos
	7 to 12 mos.
	1 to 2 yrs.
	More than 2 yrs

### Hypertensive Information

magne	Pre-Test
INST	TRUCTIONS: Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answers that statement. Mark an "X" on the line or lines in front of your answer(s).
EX	XAMPLE: Boston is the capital of:
	Connecticut
	X Massachusetts
	Vermont
1.	The normal range of blood pressure is usually listed as:
	110/200 - 160/220
	90/50 - 100/60
	120/80 - 140/90
2.	A high diastolic pressure means that:
	The heart is pumping too fast.
	The heart is slowing down to rest.
	The heart is not able to relax during the rest phase.
3.	At the peak of the heart beat the pressure in the arteries reaches a maximum. This maximum pressure is called the:
	Systolic pressure.
	Diastolic pressure.
4.	Blood pressure is:
	The amount of blood in the circulatory system.
	The force or pressure the blood exerts on the walls of the veins.
	The force or pressure the blood exerts on the walls of the arteries.

5.	Hypert	ension can lead to which three of the following:
		Brain damage.
		Diabetes.
		Obesity.
		Kidney disease.
		Heart disease.
6.	The go	al of hypertension treatment is to:
		Open veins wider, lowering the blood pressure.
	10/300	Open the arteries wider, lowering the blood pressure.
		Open the arterioles wider, lowering blood pressure.
7.		ension develops gradually over a period of years but usually s between the age range of:
		20 - 30 45 - 50 55 - 65
		30 - 40 50 - 55
8.	With h	is/her hypertension under control, the patient can:
		Look forward to a normal active life.
		Look forward to life at a slower pace.
		Eliminate a lot of the physical activities he used to perform.
9.	In the	great majority of people with high blood pressure:
		No specific physical cause can be found.
		Fatigue is the major cause of high blood pressure.
		Kidney ailments were determined as a condition leading to hypertension.

10.	Hypertension is a:	
	Continually elevated systolic blood pressure.	
	Occasionally elevated systolic blood pressure.	
	Continually elevated diastolic blood pressure.	
11.	The doctor may require regular visits as part of your treatment because:	¥
	Of an extremely high blood pressure.	
	Of your stress situation in life.	,
	Of the need to monitor your progress when on medications.	
12.	What factors help the blood pressure to rise?	
	Not enough rest	
	Overweight	
	Stress, such as worry, nervousness, tension	
	Late hours (2300 0200)	0
	Cigarette smoking	
13.	Hypertension is a lifelong condition which can be:	
	Cured.	
	Prevented.	
	Controlled.	
11	The second of th	
14.	What is the usual treatment plan for someone with hypertension?	
	Careful examination (including laboratory tests) and monitoring of blood pressure (regular checkups).	
	Getting more rest.	
	Eating less meat.	
	Eating less salt.	
	Prescription of a drug(s) to control blood pressure.	
	Reduction of workload (avoid fatigue).	~
	Lose weight if overweight.	/
	Reduce or stop smoking.	/
	Reduce of stop smoking.	/

#### HYPERTENSIVE OBJECTIVES

- . Define blood pressure.
- . Define systolic pressure and diastolic pressure.
- . Define hypertension and give some indication of the range of blood pressure in which it falls.
- . Define borderline hypertension and indicate the pressure range in which it falls.
- . List several diseases hypertension is directly related to.
- . Explain the implications of high blood pressure.
- . Tell whether hypertension is controllable with medication.
- . Tell what the hypertensive patient's attitude toward overweight should be.
- . Tell what the hypertensive patient's attitude toward smoking should be.
- . Tell what the goal of hypertension treatment is for the patient's health.
- Explain why the doctor may require regular visits as part of the patient's treatment.
- . State what the hypertensive patient can look forward to with his disease under control.

EDUCATIONAL INTERVENTION: HYPERTENSION INFORMATION

#### Hypertensive Information

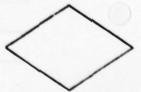
_		Post-test
INS	STRUCTIONS:	Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answers that statement. Mark an "X" on the line or lines in front of your answer(s)
F	EXAMPLE:	Boston is the capital of:
		Connecticut
		X Massachusetts
		Vermont
1.	What is th	e usual treatment plan for someone with hypertension?
		reful examination (including laboratory tests) and ditoring of blood pressure (regular checkups).
	Get	ting more rest.
	Eat	ing less meat.
	Eat	ing less salt.
	Pre	scription of a drug(s) to control blood pressure.
	Red	uction of workload (avoid fatigue).
	Los	e weight if overweight.
	Red	uce or stop smoking.
2.	Hypertensi	on is a lifelong condition which can be:
	Cur	ed.
	Pre	vented.
	Con	trolled.

3.	What factors help the blood pressure to rise?	-
	Not enough rest	
	Overweight	
	Stress, such as worry, nervousness, tension	
	Late hours (2300 0200)	4
	Cigarette smoking	
4.	The doctor may require regular visits as part of your treatment because:	
	Of an extremely high blood pressure.	
	Of your stress situation in life.	
	Of the need to monitor your progress when on medications.	
5.	Hypertension is a:	
	Continually elevated systolic blood pressure.	
	Occasionally elevated systolic blood pressure.	
	Continually elevated diastolic bloos pressure.	
6.	In the great majority of people with high blood pressure:	
	No specific physical cause can be found.	
	Fatigue is the major cause of high blood pressure.	
	Kidney ailments were determined as a condition leading to hypertension.	
7.	With his/her hypertension under control, the patient can:	
	Look forward to a normal active life.	
	Look forward to life at a slower pace.	
	Eliminate a lot of the physical activities he used to perform.	

8.	Hypertension develops gradually over a period of years but usually appears between the age range of:
	20 - 30 45 - 50 55 - 65
	30 - 40 50 - 55
9.	The goal of hypertension treatment is to:
	Open veins wider, lowering the blood pressure.
	Open the arteries wider, lowering the blood pressure.
	Open the arterioles wider, lowering blood pressure.
10.	Hypertension can lead to which three of the following:
	Brain damage. Kidney disease.
	Diabetes Heart disease.
	Obesity.
11.	Blood pressure is:
	The amount of blood in the circulatory system.
	The force or pressure the blood exerts on the walls of the veins.
	The force or pressure the blood exerts on the walls of the arteries.
12.	At the peak of the heart beat the pressure in the arteries reaches a maximum. This maximum pressure is called the:
	Systolic pressure.
	Diastolic pressure.
13.	A high diastolic pressure means that:
	The heart is pumping too fast.
	The heart is slowing down to rest.
	The heart is not able to relax during the rest phase.
14.	The normal range of blood pressure is usually listed as:
	110/200 - 160/220
	90/50 - 100/60
	120/80 - 140/90

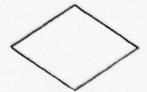
#### Low Sodium Diet Information

-	ITe-Test		
INSTRUCTIONS:	Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answers that statement. Mark a "\" on the line or lines in front of your answer(s).		
EXAMPLE:	Boston is the capital of:		
	Connecticut		
	/ Massachusettes		
	Vermont		
	asinati tinali .nussaale		
	vater contains varying amounts of Sodium, depending on the ich you live. The water should <u>not</u> contain more than:		
10	milligrams of Sodium per cup		
5	milligrams of Sodium per cup		
20	milligrams of Sodium per cup		
When you e choices?	at out in a restaurant, which entrees are the safest		
Lam	b chops		
Bro	iled steak		
Gro	und beef		
Fis	h		
Por	k chops		
3. Which medi	cines can be a high source of Sodium?		
Ant	acids		
Cou	gh medicines		
Lax	atives		
Pai	n relievers		

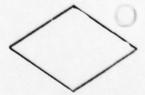


#### Low Sodium Diet Information

4.	Regular baking soda (Sodium Bicarbonate) consists of approximately how much Sodium?
	2,000 milligrams of Sodium per teaspoon
	3,000 milligrams of Sodium per teaspoon
	1,000 milligrams of Sodium per teaspoon
5.	You may eat fruits and drink their juices without worrying about Sodium content.
	False True False to amagnific a doc. 01
6.	Which of the following beverages has the lowest Sodium content?
	Coca Cola Ginger Ale Orange Crush
	Pepsi Cola Lemon Lime Beer
7.	Which of the following beverages has the highest Sodium content?
	Coca Cola Ginger Ale Orange Crush
	Pepsi Cola Lemon Lime Beer
8.	Which of the following foods are high in Sodium?
	Salt Pork Bacon
	Olives Party dips and snacks
9.	You should not eat canned or frozen foods when the labels say:
	Salt and sugar added
	In water without added salt or sugar
	Monosodium Glutamate
0.	Processed cheese, cheese spreads and peanut butter are all high in Sodium.
	False True



	and Diet Intolmetion		
il. Mea	ts that are high in	Sodium include which of	the following:
_	Lamb chops	Ground meat	Sausage
_	Hams	Luncheon meats	
2. One	level teaspoon of sa	alt contains approximat	ely:
	_ 5,000 milligrams		
_	2,300 milligrams		
_	_ 10,000 milligrams	s of Sodium	
. Tab	le salt which consist about:	s of the elements Sodi	um and Chloride,
	90% Sodium		
_	_ 50% Sodium		
100000	_ 40% Sodium		
. Peor	ole on a Sodium Restr	icted Diet are usually	allowed about:
	_ 10,000 milligrams	of Sodium per day.	
	250-2,000 milligr	ams of Sodium per day.	
	_ 5,000 milligrams	of Sodium per day.	
body	ss Sodium in the bod This could result	y causes an accumulation in:	on of fluid in the
	_ Strain on the hea	rt. Labba rofus	
	_ Difficulty in bre	athing.	
	_ Swollen feet and	ankles.	



#### LOW SODIUM DIET

- . Explain that sodium is a mineral found in salt.
- . Explain why salt intake should be reduced.
- . Explain in simple terms the effect of sodium on blood volume.
- . Explain the function of the kidneys in relationship to blood volume.
- . List at least two methods that may be used so the patient may eat the same food the family does.
- . List several foods or spices in which high concentrations of sodium are found.
- . Name several foods to avoid because they are heavily salted.
- . Select from a sample menu foods that are low in sodium and can be eaten in restaurants and at food counters.
- . Select sample menus for making lunch to eat at school or work.
- . Describe the policy to follow on using salt substitutes.
- . Describe several ways to cover up the lack of sodium in the diet by using spices and herbs.
- List several sources of recipes that may be used in preparing a low sodium diet.
- State the average number of sodium grams to eliminate from a simple low sodium diet.
- Describe the adjustments that may need to be made if the doctor recommends a specific level of sodium each day.

EDUCATIONAL INTERVENTION: LOW SODIUM DIET

Name several foods to avoid because they are beautify saited.

list at least two methods that may be awal so the

## Low Sodium Diet Information Post-test

INSTRU	may have more than one correct answer. Decide whe choice or choices best answers that statement.	Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answers that statement. Mark a " $\wedge$ " on the line or lines in front of your answer(s).		
EXAM	E: Boston is the capital of:			
1/8	Connecticut			
	√ Massachusettes			
	Vermont			
<del>,</del>	Honorotten Gurantes			
bo	ss Sodium in the body causes an accumulation of fluid in This could result in:	the		
_	Strain on the heart			
	Difficulty in breathing			
i men	Swollen feet and ankles			
. Pe	e on a Sodium restricted diet are usually allowed about	:		
	10,000 milligrams of Sodium per day			
	250 - 2,000 milligrams of Sodium per day			
	5,000 milligrams of Sodium per day			
. Ta	salt which consists of the elements Sodium and Chlorid	e, is		
	90% Sodium			
	50% Sodium			
	40% Sodium			
. On	evel teaspoon of salt contains approximately:			
	5,000 milligrams of Sodium			
	1000 Or min or			
-	2,300 milligrams of Sodium			



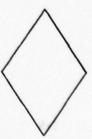
Sodium Diet	Information		
Meats that	are high in S	Sodium include which of	the following:
Lamb	chops	Ground meat	Sausage
Hame	-	Luncheon meats	
Processed cin Sodium.	haese, cheese	our good seritors, so so	
Fals	a	True	
You should	not eat canne	ed or frozen foods when	the labels say:
Salt	and sugar ad	lded	
In w	ater without	added salt or sugar	
Mono	sodium Glutam	nate	
Which of the	e following f	cods are high in Sodiu	m?
Salt	Pork	Bacon	
011v		Party dips an	
Which of the	following b	everages has the highe	st Sodium content?
Coca	Cola	Ginger Ale	Orange Crush
Peps	Cola	Lemon Lime	Beer
Which of the	following b	everages has the <u>lowes</u>	t Sodium content?
Coca	Cola _	Ginger Ale	Orange Crush
Peps	Cola	Lemon Lime	Beer
		rink their juices with	out worrying about
False	тт	rue	
		ium Bicarbonate) consi	sts of approximatel
	Meats that  Lamb  Hams  Processed clin Sodium.  False You should  Salt  In water  Monor Which of the  Coca  Peps: Which of the  Coca  Peps: You may eat Sodium conte	Meats that are high in S Lamb chops Hams  Processed cheese, cheese in Sodium False  You should not eat cannot salt and sugar according to the following in the salt Pork Olives  Which of the following in the salt Pork Coca Cola Pepsi Cola  Which of the following in the salt Pork Coca Cola Pepsi Cola  You may eat fruits and desodium content False Telese	Lamb chops Ground meat  Hame Luncheon meats  Processed cheese, cheese spreads and peanut but in Sodium.  False True  You should not eat canned or frozen foods where Salt and sugar added  In water without added salt or sugar  Monosodium Glutamate  Which of the following foods are high in Sodium Salt Pork Bacon  Olives Party dips and Which of the following beverages has the higher Coca Cola Ginger Ale  Pepsi Cola Lemon Lime  Which of the following beverages has the lowes Coca Cola Ginger Ale  Pepsi Cola Lemon Lime  You may eat fruits and drink their juices with Sodium content.  False True  Regular baking soda (Sodium Bicarbonate) consi



3,000 milligrams of Sodium per teaspoon

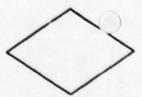
1,000 milligrams of Sodium per teaspoon

Low	Sodium Diet Information
13.	Which medicines can be a high source of Sodium?
	Antacids Laxatives
	Cough medicines Pain relievers
14.	When you eat out in a restaurant, which entrees are the safest choices?
	Lamb chops Ground beef Pork chops
	Broiled steak Fish
15.	Drinking water contains varying amounts of Sodium, depending of the area in which you live. The water should not contain more than:
	10 milligrams of Sodium per cup
	5 milligrams of Sodium per cup
	20 milligrams of Sodium per cup



#### General Medications Pre-test

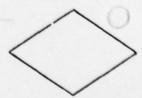
INSTRUCTIONS:	Read each statement carefully. The statement listed may have more than one correct answer. Decide which choice or choices best answers that statement. Mark an "X" on the line or lines in front of your answer(s)		
EXAMPLE:	New York City is on:		
	X the East coast.  Lake Michigan.		
	the West coast.		
1. If you have	e problems with your medication, you should:		
Cal	1 the doctor.		
Try	to work it out on your own.		
Tak	e what you think is the proper amount.		
	ays supply of medicine should you have on hand prior dication running out.		
4 d	ays		
6 d	ays		
3 d	ays		
	ng the hospital, you find that you do not know where r prescription refilled. What do you do?		
Wai	t until you need the refill.		
Go	back and ask for the information to be wirtten down.		
Cal	1 the clinic when you get a chance.		



4.	If you reason	have a change in bowel habits, which of the following s could be causing the problem?
		The amount of liquid you drink.
		The type and amount of food you eat.
	pakoas	The amount of activity you do.
5.	Childr.	en should watch you take your medication(s).
		True False
6.		of the following should you know about your medications you leave the hospital or clinic?
		Name of medication(s).
		Reason you are taking it.
		When you are to take it.
		Amount you are to take.
		How to store it.
		Any symptoms that should be reported to the doctor or nurse.
	-	Approximately how long you will be taking the medication and if you will need a prescription.
7.		have a recurrence of an old illness and still have some rold medications, you should:
		Contact a doctor.
		Use the medication.
		Wait and see if it will go away using the old medication.
8.	If you you sh	forget to take your medications at the prescribed times, ould:
		Take the proper amount at once.
•		Wait and take twice the amount at the next scheduled time.
		Wait until the next scheduled time and then take only the amount prescribed.
		83

#### General Medications

9.	Doctors do not need to know those medications which you did not need a prescription to buy.
	True .Not to our blupti to second will
	False and pool to amount but says sell
10.	Medications you are not actively taking should be destroyed for which of the following:
	Prevent children from taking them.
	Old medicine may not be capable of doing its job.
	Takes up space in the medicine cabinet.



Wall and see it it will go sway using the old medication.

# PROJECT: PACOMED HEALTH CARE STUDIES DIVISION ACADEMY OF HEALTH SCIENCES FORT SAM HOUSTON, TEXAS 78234

#### MEDICATIONS

Upon completion of this program the patient will be able to:

- Recognize from a complete list of medications, his/her medications and describe their use.
- . Explain the importance of taking medication as prescribed.
- . Recognize the eight rules a patient should follow when on medication.
- . Explain the importance of and how to fill out a medication record sheet.
- . Explain the importance of not taking another persons medications.
- . Explain why medications should not be taken in front of children.
- . Explain two different methods of taking medications to insure that the proper amount is taken at the designated time.
- . Explain what effect alcoholic beverages can have on some medications.
- . Tell what to do with medications no longer being used.
- . Explain allergic reactions that may occur from prescribed medications.
- . Tell how many days medication the patient should have on hand prior to having the prescription refilled.
- . Tell why the patient should take his/her medication at the prescribed time.
- . Explain why it is important to tell the physician about the medications the patient is taking that do not need a prescription.

PROJECT: WACOMED REALTH CARE STUDIES DIVISION ACADION OF REALTH SCIENCES FORT SAM HOUSTIN, TEXAS 1843A

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dpon completion of this program the nations will be able too.

Recognize from a complete list of medications, his/her medications and describe thear use.

. Explain the importance of taking medication as prescribed.

Recognize the eight rules a patient should follow when on medication

EDUCATIONAL INTERVENTION: MEDICATIONS

Explain the importance of not taking enotion parama medications,

Explain any sedications should not be taken in front or children.

supposit the officerent methods of taking medications to insure that

Explain what affect alcoholic buverages one board redwintages

Tail what to do with medications no longer being used

Explain allargic reactions that may occur from proceeding madeson to-

Tell how miny days neddontion the patient about have on hand progr

Tell why the partent should take his/her meetestion at the prescribed

Explain why the largest to tell the constant at the states.

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# PROJECT: PACOMED HEALTH CARE STUDIES DIVISION ACADEMY OF HEALTH SCIENCES FORT SAM HOUSTON, TEXAS 78234

	rost-test
INSTRUCTIONS	may have more than one correct answer. Decide which
	choice or choices best answers that statement. Mark an "X" on the line or lines in front of your answer(s)
EXAMPLE:	New York City is on:
	X the East coast.
	Lake Michigan.
	the West coast.
1. Medicati	ons you are not actively taking should be destroyed for the following:
P	revent children from taking them.
O	ld medicine may not be capable of doing its job.
т	akes up space in the medicine cabinet.
	do not need to know those medications which you did not rescription to buy.
T	rue to delike estidai levad ni santido a even dag 31 . V
F	alse wasteb war alwatt in income edt
<ol><li>If you f you shou</li></ol>	orget to take your medications at the prescribed times, ld:
т	ake the proper amount at once.
	ait and take twice the amount at the next scheduled ime.
And in case of the last of the	ait until the next scheduled time and then take only he amount prescribed.



4.	If you have a recurrence of an old illness and still have some of your old medications, you should:	
	Contact a doctor.	
	Use the medication.	
	Wait and see if it will go away using the old medication.	
5.	Which of the following should you know about your medications before you leave the hospital or clinic?	
	Name of medication(s).	,
	Reason you are taking it.	
	When you are to take it.	
	Amount you are to take.	
	How to store it.	
	Any symptoms that should be reported to the doctor or nurse.	
	Approximately how long you will be taking the medication and if you will need a prescription.	
6.	Children should watch you take your medication(s).	
	True False	
7.	If you have a change in bowel habits, which of the following reasons could be causing the problem?	
	The amount of liquid you drink.	
	The type and amount of food you eat.	
	The amount of activity you do.	
8.	When leaving the hospital, you find that you do not know where to get your prescription refilled. What do you do?	
	Wait until you need the refill.	
	Go back and ask for the information to be written down.	
	Call the clinic when you get a chance.	1
		0

,.		medication running out.
		4 days
		6 days
		3 days
10.	If you	have problems with your medication, you should:
		Call the doctor.
		Try to work it out on your own.
		Take what you think is the proper amount.



INCLOSURE 4

FORMATIVE EVALUATION: PATIENT VERSION FORM

# PROJECT: PACOMED HEALTH CARE STUDIES DIVISION ACADEMY OF HEALTH SCIENCES FORT SAM HOUSTON, TEXAS 78234

FORMATIVE EVALUATION: PATIENT VERSION

-1.	Date:
2.	Patient's Name:
3.	Aga: w.citina astitutelidana fila
4.	Social Security Number:
5.	Race or Ethnicity:
6.	Sex: by to imposite any foot of the
7.	Education. Completed:
8.	Occupation:
9.	Program Title:
10.	Evaluator:
put The	tructions: This form is to be filled out in a personal interview with the patient the patient works the program. The interviewer should make a special effort to the patient at ease and explain that we are testing the program, NOT THE PATIENT results of these tests will be kept private and will only be seen by those contrad with this project.

#### OPERATIONAL DEFINITIONS:

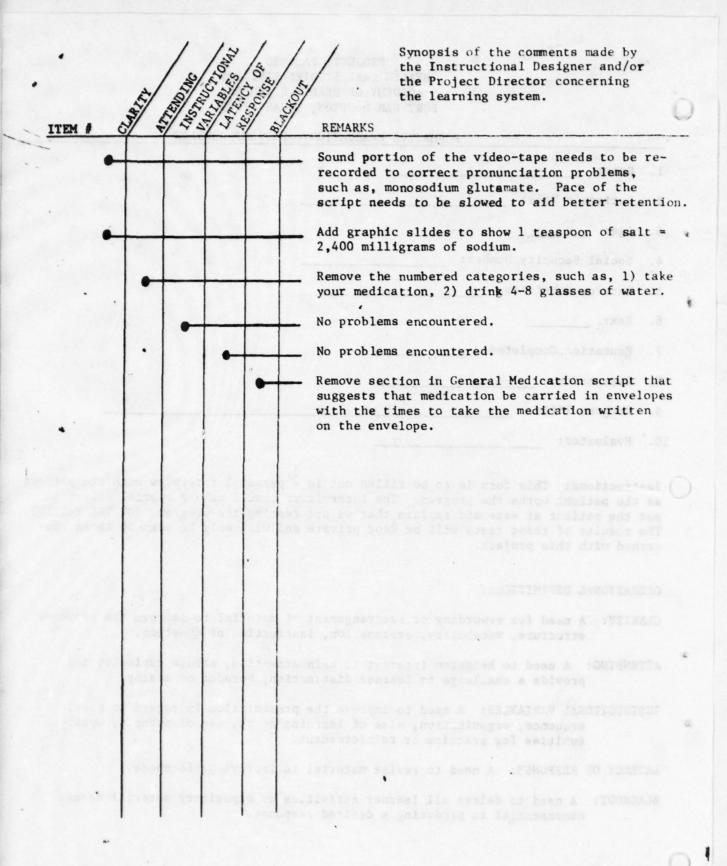
CLARITY: A need for rewording or rearrangement of material to improve the sentence structure, vocabulary, explanation, instruction or question.

ATTENDING: A need to heighten interest to gain attention, arouse curiosity and provide a challenge to learner distraction, boredom or apathy.

INSTRUCTIONAL VARIABLES: A need to improve the presentation in regard to pace, sequence, organization, size of learning steps, use of prompts, opportunities for practice or reinforcement.

LATENCY OF RESPONSE: A need to revise material to improve performance.

BLACKOUT: A need to delete all learner activities or expository material deemed nonessential in producing a desired response.



INCLOSURE 5
PHYSICIAN EVALUATION FORM

# PROJECT: PACOMED HEALTH CARE STUDIES DIVISION ACADEMY OF HEALTH SCIENCES FORT SAM HOUSTON, TEXAS 78234

PHYSICIAN/NURSE	CLINICIAN EVALUATION FORM	
SUBJECT Hygen Chasian	FORMAT	
IS THE SUBJECT COVERED COMPLETELY? 45	_	
At this joint I would a	add Withy	

WHAT WOULD YOU DELETE?

No thing .

IS THE CONTENT ORGANIZED PROPERLY? 4.5 IF NOT, HOW WOULD YOU CHANGE THE SEQUENCE?

ARE ALL THE CRUCIAL OBJECTIVES EMPHASITED? 45

(BEHAVIORS OR KNOWLEDGE TO THE MUST MASTER IN ORDER TO COPE AND LIVE EFFECTIVELY WITH HIS DISEASE OR PROBLEM.)

IF NOT, PLEASE ELABORATE.

ARE FAMILIAR SYMBOLS AND CONCEPTS USED TO HELP EXPLAIN UNFAMILIAR SUBJECT MATTER?

yes.

0

FOR WHAT PATIENT POPULATION WOULD YOU RECOMMEND THIS PRESENTATION?

This has broad appeal. So fan there has been only one partient that on second thought I would not have sent for this. Some people will not be able to get out of the dominant - dependent rolle—
its a fact of like.

DO YOU FEEL THE PRESENTATION IS TOO LONG, TOO SHORT AND WHY?

Just the right length.

There may be bugs — but at this point well have to let it run up the flag pole to see, our patients well tell as where we've wrong,

Tabuth Henry

ARE PARTITIAN SYMBOLS AND CONCEPTS USED TO HELP EXPLAIN UNWASTLIAN VURNERS MATTERS

INCLOSURE 6
FINAL STAFF EVALUATION

# PROJECT: PACOMED HEALTH CARE STUDIES DIVISION ACADEMY OF HEALTH SCIENCES FORT SAM HOUSTON, TEXAS 78234

## FINAL STAFF EVALUATION

SUBJECT: Hy	pertension	Hypertensic TITLE: <u>Diet &amp; Gene</u>	on, Low Sodium eral Medications
WORKING TIME:	1 Hour	DATE PRODUCED:	1975
FORMAT: Vide	eo-tape	DATE EVALUATED:	1975
PRODUCER:	ACOMED/Brady/MedFact	<u> </u>	
PRICE: See Cos	st Analysis, Table 11,	INTENDED AUDIENCE	General Adult
Ex	efines what blood pressure plains the need to stop sudden tensions.	is and that it is cor oking, loose weight,	exercise and
OBJECTIVES:	Met basic requirements of objectives.	the learning system b	pehavioral
the concurrent learning system	THS AND WEAKNESSES: The package. As such, it work use within the system. The privacy Act Statement, oral Objectives	ks well with the form he following are the	forms used in the
			LEIDABEN JAOUKINES
DEFINITION OF	SELF-INSTRUCTIONAL FEATURE	<u>S</u>	
PRE-TEST	Questions or tasks at t system to measure subje the material to be pres	ct entry level (prior	
OBJECTIVES	Description of what the successful completion o		
PRACTICE	Questions or tasks in t	he instructional syst	em similar to the
POST-TEST	Questions or tasks at t which prove the subject		
FEEDBACK	Initial reactions to th (interviewed comments.)	e instructional syste	m by the patient

PLEASE TURN PAGE

#### ATTITUDE

Measures feelings, emotions, or attitudes towards the instructional strategy, its concepts and contents.

The learning system contains the self-instructional features marked with a

The results of each trial (version) are listed to the right of the feature.

Self-Instructional	La destination with the comment of t	in the same of	myd rithataus
Features	1st Version	2nd Version	3rd Version
Pre-test	4 of 10 second 0	of 10 maged	7 -6 10
Hypertension	4 of 10 passed. 8	or to passed.	7 of 10 passed
Low Sodium Diet	1 of 10 passed. 3	of 10 passed.	4 of 10 passed.
General Medications	9 of 10 passed. 6	of 10 passed.	4 of 10 passed.
Objectives .	See Behavioral Obje	ectives.	
Practice	See Instructional	System.	
Post-test			
Hypertension	8 of 10 passed. 9	of 10 passed.	10 of 10 passed
Low Sodium Diet	8 of 10 passed. 9	of 10 passed.	10 of 10 passed
General Medications	6 of 10 passed. 6	Of 10 passed.	5 of 10 passed.
Feedback	See Formative Evalu	uation.	
Attitude Scale	See Process Evaluat	ion.	
TECHNICAL ASPECTS:			
F	Coor Fair Good Excell	lent	
Sound:			
Photography:	/	01_02 0e200a	

# MATRIX FOR FIELD IMPLEMENTATION

TITLE: Hypertension

TRACK	PRODUCER	COPYRIGHT	PHOTOGRAPHY	SOUND	SCRIPT	RECOMMENDATIONS
Hypertension (Filmstrip)	MedFact	N/A	N/A	N/A	N/A	Purchase the filmstrip and use as it is now produced.
Low Sodium Diet	Brady Co.	Permission to convert to video- tape would have to be secured.	New graphics will have to be produced by TASO artists.	Record new sound track.	Convert workbook into video- script.	Write a new script to cover the same material, and shoot new graphics.
General Medications Brady Co.	Brady Co.	N/A	New graphics will have to be produced by TASO artists.	Record new sound track.	Convert workbook into video- script.	Write a new script to cover the same material, and shoot new graphics.
Smoking	MedFact	N/A	N/A	N/A	N/A	Purchase the filmstrip and use as it is now produced.

#### APPENDIX 2

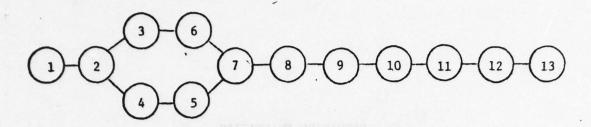
FORMATIVE EVALUATION

Diabetes Mellitus

inite Criterion Mesecce (Fra-test - Post-rest), p. 85.

0

# SUMMARY NETWORK OF INSTRUCTIONAL DESIGN FOR DIABETES MELLITUS



#### EVENT IDENTIFICATION

- 1. Topic Selected: Diabetes Mellitus
- 2. Met with Content Consultant, p. 85.
- 3. Develop Behavioral Objectives, p. 85 and Incl 1a-1c.
- 4. Conduct "Real World" Search for Existing Educational Software on Diabetes Mellitus, p. 85.
  - 5. Evaluate Existing Educational Software, p. 85.
  - 6. Write Criterion Measures (Pre-test Post-test), p. 85.
  - Design Instructional System, p. 85 (See Instructional System, Incl 3-a through 3-n.)
  - Conduct Formative Evaluation, p. 86 (See Formative Evaluation Form, Incl 4.)
  - 9. Data Collection, p. 86.
- 10. Revisions, p. 89.
- 11. Conduct Physician Evaluation, p. 89 (See Incl 5 Physician Evaluation Form)
- 12. Cost Analysis, p. 89 (See Table 11, p. 100)
- 13. Final Staff Evaluation, p. 89 (See Incl 6, Final Staff Evaluation Form.)

#### 1. INTRODUCTION.

a. The following is a chronological representation of the systems approach to instructional design after the topic selection was made. Each event, as it appears in the Summary Network of the Instructional Design (p. 84), will be discussed in detail (Refer to corresponding numbers in the summary.) to give the proper perspective of the total developmental process.

#### (2) Initial Contact With the Content Consultant.

(a) In July 1975, the Instructional Designer met with the Content Consultant to outline the behavioral objectives for the instructional learning system on Diabetes Mellitus.

#### (3) Behavioral Objectives.

(a) The Diabetes Mellitus behavioral objectives are statements of tasks that the patient will be able to perform upon successful completion of the learning system. These objectives have been broken down into three separate sections: 1 Diabetes Mellitus, 2 Food Exchange List, and 3 Self-Injection of Insulin. See Inclosures 1-a through 1-c, page 101, for a list of these objectives.

#### (4) "Real World" Search.

(a) There was a great variety of educational materials to choose from which dealt with Diabetes Mellitus. Four commercial filmstrips and the American Diabetic Association workbook were selected for the formative evaluation process.

### (5) Existing Educational Software Evaluation.

(a) Evaluation of the existing educational software was conducted and documented on the Initial Staff Evaluation Forms attached at Inclosures 2-a through 2-c.

#### (6) Criterion Measures.

(a) The criterion measures were written to determine the subject's entry level, (pre-test score), insure that the instruction taught the objectives (tasks the patient must master), and that the instructional system was effective (minimum of 80 percent competency level). See Inclosure 3.

#### (7) Diabetes Mellitus Instructional System.

(a) The following is a list of the forms necessary to administer the instructional strategy for Diabetes Mellitus. These forms represent the paperwork actually encountered by each patient when s/he was given the learning system. Each form, including the learning tracks, falls in the proper order of sequence. See Inclosure 3, a-n.

- a) Privacy Act Statement
- b) Demographic Data: Diabetes Mellitus
- c) Diabetes Mellitus Information (Pre-test)
- d) Diabetes Mellitus Objectives
- e) Educational Intervention: Diabetes Mellitus Information
- f) Diabetes Mellitus Information (Post-test)
- g) Diabetic Diet Information (Pre-test)
- h) Food Exchange List Objectives
- i) Educational Intervention: Diabetic Diet
- j) Diabetic Diet Information (Post-test)
- k) Insulin Treatment Information (Pre-test)
- 1) Self-Injection of Insulin Objectives
- m) Educational Intervention: U-100 Insulin
- n) Insulin Treatment Information (Post-test)

#### (8) Formative Evaluation.

- (a) During the formative evaluation stage of Diabetes Mellitus, the system was tested on a combination of subjects from the nursing staff, non-professional MEDDAC personnel, and patients from the Family Practice Clinic. The Project Director and/or the Instructional Designer was present for each instructional session to evaluate the subject's reaction to the learning system. If the subject encountered learning problems during the presentation of the learning strategy, the difficulties were noted on the Formative Evaluation: Patient Version Form (See Inclosure 4) so that the necessary revisions could be made.
- (b) At the conclusion of the learning session, each subject was interviewed to obtain comments concerning his/her personal feelings about the program. Information is provided as follows:
  - What were the most difficult parts of the lesson? "Food Exchange Lists are hard to understand." "Test questions are not clearly stated."
  - What was the best feature of the instruction?
    "It was very complete."
  - What was the worst feature of the lesson? "Too long." "Test questions were difficult to understand."

#### (9) Data Collection.

The following is a compilation of demographic, test (pre-post), and process evaluation data.

#### (a) Demographic Data.

 $\underline{1}$  A total of 30 individuals were used as subjects during the formative evaluation stage of Diabetes Mellitus.

- Source Breakdown: The total population was obtained from the Family Practice Clinic.
- 3 Sex Breakdown: This evaluation was comprised of the following: 14 male subjects and 16 female subjects.
- 4 Age Breakdown: Fourteen subjects were in the 46-55 year age group, 12 from 56-65 years of age, and four subjects over the age of 66.
- 5 Occupation Breakdown: The occupation data is as follows: Eight retired subjects, nine housewives, one administrative person, four non-medical professionals, four blue collar workers, and four subjects identified as "other" occupations.
- 6 Marital Status: The marital status information is provided as follows: 24 married subjects and 6 widowed subjects.
- 7 Educational Level Data: Fourteen subjects had a high school education, eight subjects had attended 1-3 years of college, six subjects had obtained a Baccalaureate Degree, and two subjects had obtained a Master's Degree.
  - (b) Pre and Post-test Data Collection.
- <u>1</u> There were 78 possible correct responses to the Diabetes Mellitus Information Pre and Post-tests, 67 possible correct responses to the Diabetic Diet Information Pre and Post-tests, and 32 possible correct responses to the Insulin Treatment Pre and Post-tests. The results are broken down into categories as follows:

#### a Diabetes Mellitus Information.

- (1) Pre-test Score Range: Of the 30 participants, the highest number of correct responses was 55 and the lowest number of correct responses was 17.
- (2) Post-test Score Range: Seventy-five was the highest number of correct responses and 40 was the lowest number of correct responses.
- (3) Total Scores -- Pre-test: 429 correct responses out of 1,326 possible points = 32 percent, the average percentage correct.
- (4) Total Scores Post-test: 1,112 correct responses out of 1,326 possible points = 81 percent, the average percentage correct.

#### b Diabetic Diet Information.

(1) Pre-test Score Range: Of the 30 participants, the highest number of correct responses was 63 and the lowest number of correct responses was 27.

(2) Post-test Score Range: Sixty-seven was the highest number of correct responses and 62 was the lowest number of correct responses.

(3) Total Scores -- Pre-test: 288 correct responses out of 1,139 possible points = 25 percent, the average percentage correct.

(4) Total Scores -- Post-test: 1,243 correct responses out of 1,139 possible points = 93 percent, the average percentage correct.

## c Insulin Therapy Information. (16 of the 30 subjects received this instruction.)

(1) Pre-test Score Range: The highest number of correct responses was 12 and the lowest number of correct responses was 7.

(2) Post-test Score Range: Thirty-two was the highest number of correct responses and 23 was the lowest number of correct responses.

(3) Total Scores -- Pre-test: 234 correct responses out of 544 possible points = 48 percent, the average percentage correct.

(4) Total Scores -- Post-test: 518 correct responses out of 544 possible points = 95 percent, the average percentage correct.

(The average percentage scores were derived by dividing the total number of correct responses of the 30 subjects by the total possible points.)

#### (c) Correct Response Analysis.

1 The pre and post-tests were evaluated to determine areas to be strengthened or revised. Each subject's test responses were listed according to the corresponding behavioral objective and criterion measure. See Tables 1-6, pages 90-95, for the Correct Response Analysis-Pre-test and Post-test.

#### (d) Process Evaluation.

1 The process evaluation measured the opinions toward the instructional strategy. The results are as follows: As a result of this learning experience, 21 subjects thought they had misconceptions about Diabetes Mellitus. Nine felt they had no misconceptions. All the subjects felt that the learning experience clarified the previous misconceptions.

See Table 7, page 96 , for the Tabulation of Process Evaluation Responses.

2 Seven subject areas were listed in the Comment Section of the Process Evaluation Form for Diabetes Mellitus. A synopsis of the comments obtained in this section is provided as follows:

Physical Setting:

b Health Educator:

Audio-Visual Equipment:
Patient Education Programs:

e Paperwork:
f Patient Learning Concept:

g Other:

The comments obtained in these categories were comprised of one or two word statements, i.e., Excellent, Very Good, Extremely Helpful.

#### (10) Revisions.

(a) The first and second version results of Diabetes Mellitus, Diabetic Diet, and Insulin Treatment Information Pre and Post-test results are shown on the Total Pre and Post-test Scores, Tables 8-10, pages 97-99.

#### 1 Rationale for the revision on the Pre and Post-tests.

a The percentage of negative comments about the choice of words, or meanings in the pre/post-tests, necessitated minor revisions to clarify the meaning of the questions for the patients. Minor technical revisions on the audio track were also necessary to gain a higher quality sound level, and the narration was slowed down for better comprehension.

#### (11) Physician Evaluation.

(a) Upon completion of the revisions in the learning strategy, the Content Consultant (physician) reviewed the entire program and evaluated the content for the target population. See Inclosure 5, Physician Evaluation Form.

#### (12) Cost Analysis.

(a) The following (See Table 11, page 100) is an analysis of the costs inherent in developing a learning system for Diabetes Mellitus. The costs are listed in three separate categories; 1) hardware (equipment), 2) software (educational materials), 3) administrative (salaries, reproduction costs, etc.). For further cost information see Appendix 9, pages 465-467, Current Baseline Information and Cost Analysis.

#### (13) Final Staff Evaluation.

(a) Upon completion of the formative stage of the evaluation, the learning system was evaluated as a total package. See Inclosure 6, Final Staff Evaluation Form.

TABLE 1

DEAD US MELLITES

CORRECT RESPONSE ANALYSIS FRE TEST

		CORRECT RESPONSE ANALYSIS FRE TEST	
BURAVIORAL DELICTIVE	CRITERION MEASURES		NUMBER OF INCORRECT RESPONSES*
-	(Inc.)	RESPONSE ANALYSIS	RESTONATES.
1	,	11 1-11111 - 1111111-111111	6
	a self from	+ 1 + 1 1 1 1 1 1 1 1 1 1 1	8
			8
1 4 4	1		0
		<u> </u>	3
			6
			8
		-++++	(1)
			0
5	4	+-1+++++-+++++++++++++++++++++	3
		- + - + + + - 1 - + 1 + 1   1 + 1 - + 1 1 + 1 +	CQ .
		+-++++++++-++++++	00
6	5	++++++-++++++++++++++++++++++++++++++++	
7 & 8	6	++-++++++++++++++++++++++++++++++++++++	2
		_ + + + + + - + + + + - + + - + + + + +	0
9	7		83
,		+-+++-++++++++++++	7
		+-+++++++++++	(0)
		++++	(13)
		+++++++++++++-+++	00
		+++++++++++	0.0
10	8	++++++-++++++++++++++++++++++++++++++++	1
10	9	+++++++++++++++++++++++++++++++++++++++	(13)
11	10	++-++++++	(21)
		-++++++++++	05
12	11	-+-+-++++++++-+	0
		++++	(16)
		+-++++-++++++++++++++++++++++++++++++++	6
		+++++	(1)
13	12	+++++	(1)
		***************************************	(3)
		+-++++++	00
		+-+-+-++++++++++++++++++++	9
		+-+-+++++-+-+++++++++++++++++++++++++++	8
		-++++++	(10)
14	13	++-+++-++++++++++++++++++++++++++++++++	7
		+++	C3
de	thou, ou	+-+++++	(0)
15	14	<del>+ - + + - + + + - + + + + + + + + + + +</del>	
		<del>-++-++-++-++++++++++++++-++-++-</del>	<u>a</u>
		++-++++-++++++++-	
		++-++-++++	ക്
		++-+++++++++	(12)
		-+-+++-+++++-++++++++++++++++	5
		+++-++-++-++++-++-+	9
		-++-++-++	<b>(19</b>
16	15	++-+-++-++	@
		+ + - + + - + + + + + + + + + + + + + - + - + + - + + - + + - + + - + + - + + - + + - + + - + + - + + - + - + + - + + - + - + + - + - + + - + - + + - + - + + + + - + - + - + + + + + + + + + + + + + + + - + - + - + - + - + - +	(3)
		+-+++++++++++++	(10)
		+++-++++++++++++++++++	7
		+-++++++++++++	12
17	16	+++++-+++++++++++++++++++++++++++++++++	5
		+-++++-+++++	9
17	17	*+	(10
18	18	++-+++++++++	(10)
10	10	+-++-++++-+++++	(10)
		++-+++-++++++++++++++++++++++++++++++++	3
		++-+++++++++-++-++-++-+++++	7
4.5		+-++-+++-++-+-+-+-+	9
19	19	_++-+-++	(8)
19	20	++	<u> </u>
20 21	21 22	+++	02
22	23	+-++++++	9
22	24	-+++-+++++++++++	00
		+-+++++++++	W .
		<u>+ - +</u>	9
		++	(13)
		++-++-++-++-++-+	(II)

<sup>- -</sup> INCORRECT RESPONSE

<sup>+ -</sup> CORRECT RESPONSE

CIRCLED AREAS INDICATE AREAS NEEDING SPECIAL REVISION IN THE LEARNING STRATEGY

<sup>\*</sup>RESULTS TABULATED ON THE PRE-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

ACADEMY OF HEALTH SCIENCES (ARMY) FORT SAM HOUSTON TX--ETC F/G 6/5
STRATEGY FOR INSTRUCTIONAL SYSTEMS DESIGN AND FORMATIVE EVALUAT--ETC(U) AD-A070 921 JUL 76 D H KUCHA UNCLASSIFIED HCSD-79-001-B NL 2 of 7 AD A070921 U A STATE OF

TABLE 2

DIAM HS MELLIUS

		CORRECT RESPONSE ANALYSES - POST-TEST	
VEHAS TORAL	CRITERION		NUMBER OF
	MEASURES	RESPONSE AEALYSTS	INCORRECT RESPONSES*
- 1	_(Incl 1-	+++++++++	4
		+ + + + + + + + + + + + + + + + + + + +	3
		++++++++	4
		- 1 1 + + 1 1 1 1 1 1 1 1 - 1 1 - 1 1 + 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	5
		11-1-11-11-11-11-11-11-1-1-1-1-1	8
	2	+ + + + + + + + + + + + + + + + + + + +	
	3	+++++++++++++++++++++++++++++++++++++++	
4	5	+++++++++++++++++++++++++++++++++++++++	T
6	6	++++++++++++++++++++++++++++++++	1
1	7	+ + + + + + + + + + + + + + + + + + + +	3
		++++++++++++++++++++++	6
		1+++-++-+++-+	9
		+++++++++++++++++++++++++++++++++++++++	
8	8	+++++++++++++++++	0
9	9	+++++++++++++++++++++++++++++++++++++++	0
		- + - + + + + - + + + + + + + + + + + +	4
		++++-+++++++++++++++++++++++++	2
10	10	+++++++++++++++++++++++++++	3
		+++++++++-+++++++++++++++++++++++++++	4
		+++++++++++++++++++++++++++++++++++++++	1 2
		+++++++++++++++++++++++++++++++++++++++	
		+++++++++++++++++++++++++++++++++++++++	0
11	11	++-++-+++-++-+	9
		+++++++++++++++++++++++++++++++++++++++	2
		+++++++++++++++++++++++++++++++++++++++	2
		+++++++++++++++++++++++++++++++++	1
12	. 11	+++-+++++++++++++++++++++++++++++++++++	3
		+++-+++++++++++++++++++++++++++++++++++	3
		+++++++++++++++++++++++++++++++++++++++	0
		-++++++++++++++++++++++++++++++++++++++	2
13	12	++++-+++++++++++++++++++++++++	3
		+++++++++++++++++++++++	4
		* + - * * * * * * * * + + + + +	6
14	13	+++++++++++++++++++++++++++++++++++++++	1 2
15	13	+++++++++++++++++++++++++++++++++++++++	1
	.,	++++-++++++++++++++++++++++++++++++++++	5
		+-+++++++++++++++++++++++	6
		++++-+++-++++++++-++-+	7
		-++++-+++++++++++++++++++++++++	7
16	14	+++++++++++++	6
		+ - + - + + + + + - + + + + + + + + + +	<u>6</u> 9
		++++++-++++++++++++++++++++++++++++++	6
17	15	1+++++++++++++++++++++++++++	3
		++++++++++++++++++++++	9
		-+++	
17	16	+++++++++++++++++++++++++++++++++++++++	0
18	17	+++++++++++++++++++++++++++++++++++++++	0
18	18	+++-++	9
		+++++++++++++++++++++++++++++++++++++++	1
		-++-++++++++++++++++++++++	6
		++-+++++++	9
		+++++++++++-+++-++++++	8
19	19	+++++++++++++++++++++++++++++++++++++++	3
		+++++++++++++++++++++++++++++++++++++++	
20	20	+++++++++++++++++++++++++++++++++++++++	6
21	21	++++++++++++++++++++++++++++++	1
		+++-+++++++++++++++++++++++++++++++++++	1
		++-+++++++++++-++++-	8
21	22	+-++-++++++++++++++++++++++++	6
		+++++++++++++++++++++++++++++++++++++++	1
		+++++++++++++++++++++++++++++++++++++++	
		+++++++++++++++++++++++++++++++++++++++	3
		+++-+++-++	9
		-++++++++++	(11)
22	23	+++++++++++-++++++++-	7
		+++++++++++++++++++++++++++++++++++++++	5
22	24	****************	0

<sup>- =</sup> INCORRECT RESPONSE

<sup>+ -</sup> CORRECT RESPONSE

CIRCLED AREAS INDICATE AREAS NEEDING SPECIAL REVISION IN THE LEARNING STRATEGY

<sup>\*</sup>RESULTS TABULATED ON THE POST-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

TABLE 3
DIABETIC BILL
CORRECT RESPONSE ANALYTIS - PRU TEST

		CORRECT RESPONSE ANALYSIS - PRE TEST	
DEBIN TORAL	CIRTERION	CORRECT RESIDNAL ABOUT ITS THE TEAT	NUMBER OF
	NEASURES		INCORRECT
et netivis	(Incl 1-	RESPONSE ANALYSTS	RESPONSES*
and the same of the same of	1	111 -1111-111-11111-111	8
		11111111111111111111111111111	7
			1
		- 4 - 1 - 4 4 4 1 1 4 1 - 4 1 1 - 4 1 - 4 4 - 4 4 4 4	
			(19)
		++1++++++++++++++++++++++++++++++++++++	
		++++++-++-++-++-++	7
		+++-++-+	0
		-++++	00
		+++	- 605
	•	+++++++++	<b>6</b>
	3	+++-++++++++++	THE REAL PROPERTY AND ADDRESS OF THE PERSON
	4	+ + + + + + + + + + + + + +	- 5
	4	+-+++-++	(13)
		++++-+-++-+	(13)
		+++-+-++++-++++-++	
		+++++++++++++++++++++++++++++++++++++++	7 3
		++++++-++++++++++++++++++++++++++++++++	6 8
2	5	+++	
		++-++++-	02)
2	6	++++-+++-+++++++	00
		++-++-++-++++++++-	ap
		++++++-+++++++++-+++-+++-	6
		+++-++++++-++++++++++++++++++++++++++	6
2	7	+++++++++++++++++++++++++++++++++++++++	4
3	8	++	99
		++++++++	0.6)
		++++-+-+-+++++++	ap_
		-++-++++-+++++++++++-	9
3	9	+++++++++++++++-	4
		+++-++++++	9
		++++++++++++++-	3
		++++++++-+++++++++++++++	7
		++++++-+++-++-++-++-++-++	5
		+++++-++++++++++++++++++++++++++++	ap
		++++-+++++++++	(14)
3	10	++++-+++++++++++++	
		+++++-++-++-+	7
		+++++++++++++++++++++++++++++++++++++++	3
		+++++++++++++++++++++++	7
		+++-++-+++++++++++	8
		-++++++-++++++-	(10)
		+-+++-+-+	(0)
		-++-+++-+++++++++++++++++++++	4
		+ - + + - + + + + + + + - + + + + +	8
		+++-++++++++-+++++++++++++++	_6
4	11	+-+++++-	(10)
4	12	+++++	9
4	13	+++++++++++++++++++++++++++++++++++++++	- 5
		+++-+-++++++++++++++	(10)
		+++-++++	QD.
		+++-+++++++++++++++++++++++++++++++++++	6
		-++++++++++++++++++++++++++++++	2
		++++	(13)
5	14	+++-++++++	(14)
		++++-++-+++++++++++	3
		++++-+++	(12)
5	15	+++-+++++++++++++++++++	5
		+++++	(13)
		+-++++-+-+	(10)
		+++-++++-++++-++-+	9
		+++++++++++++++++++++++++++++++++++++++	7
5	16	+++-+-+++++++++	ab
		+++++++-++-++-++-++-+	8
		+-+++-++-++	7
		+++++++++++	(12)
		+++++++	9

- - INCORRECT RESPONSE

+ = CORRECT RESPONSE

• CIRCLED AREAS INDICATE AREAS NEEDING SPECIAL REVISION IN THE LEARNING STRATEGY

RESULTS TABULATED ON THE PRE-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

TABLE 4

		CORRECT RESPONSE ANALYSES - POST-TEST	
WITHAN TORAL	CRITERION	ACTION AND ADDRESS OF THE PARTY	UM Y OF
ORTECTIVE	MEASURES		C
HIPPOTE STATE	(Incl 3-	RESPONSE ANALYSIS	150
Without !	1	* * * * * * * * * * * * * * * * * * * *	
		+++++++++++++++++++++++++++++++++++++++	
		* * * * * * * * * * * * * * * * * * * *	-
		* * * * * * * * * * * * * * * * * * * *	-
1	2	********************	-i-
		++++++-++++++++++++++++++++++++++++++++	1
			2
		**********	2
		+ + + + + + + + + + + + + + + + + + + +	
1	3	+++++++++++++++++++++++++++++++++++++++	-
		* * * * * * - * * * * * * * * * * * * *	
		+++++++++++++++++++++++++++++++++++++++	
		* * * * * * * * * * * * * * * * * * * *	
		**********	1
		+++++++++++++++++++++++++++++++++++++++	2
		+++++++++++++++++++++++++++++++++++++++	4
		++++-++++++++++++++	3
2	5	+++++++++++++++++++++++++++++++++++++++	4
2	6	* * * * * * * * * * * * * * * * * * * *	1
,	,	+++++++++++++++++++++++++++++++++++++++	
		* * * * * * * * * * * * * * * * * * * *	<u> </u>
		+++++++++++++++++++++++++++++++++++++++	2
		+ + + + + + + + + + + + + + + + + + + +	
		+++++++++++++++++++++++++++++++++++++++	3
		++-++++++++++++++++++++++++++++++++++++	2
		+++++++++++++++++++++++++++++++++++++++	3
		+++++++++++++++++++++++++++++++++++++++	3
3		++++-++++++++++++++++++++++++++++++++++	1
		++++++-++++-+++++++	8
		+-+++++++++++++++++++++++++++	3
		-++++++++++++++++++++++++++++++++++++++	1
		++++++++++++++++++++++++++++++	2
		* * * * * * * * * * * * * * * * * * * *	2
		* * * * * * * * * * * - * * * - * * * *	
•	9	+++++++++++++++++++++++++++++++++++++++	1
		+++++++++-+++++++++++++	4
		+++++-+++++++++++++++++++++++++++++++++	3
4	10	+++-+++++++++++++++++++++++++++	3
4	11	+++++++++++++++++++++++++++++++++++++++	
		+++++++-+++++++++++++++++++++++++++++++	- 5
		+++++++++++++++++++++++++++++++++++++++	-
5	12	* * * * * * * * * * * * * * * * * * *	3
		+++++++++++++++++++++++++++++++++++++++	2
5	13	+ + + + + + + + + + + + + + + + + + + +	0
		+++++++-+++++++++++++++++++++++++++++++	1
		+++++++++++++++++++++++++++++++++++++++	0
		+++++++++++++++++++++++++++++++++++	2
		++-++++++++++++++++++++++++++++++++++++	
		+++++++++++++++++++++++++++++++++++++++	
5	14	+ + + + + + + + + + + + + + + + + + + +	2
5	16	+++++++++++++++++++++++++++++++++++++++	1
A STATE OF THE PARTY OF	• •	+++++++++++++++++++++++++++++++++++++++	0
		+++++++++++++++++++++++++++++++++++++++	0
		+++++++++++++++++++++++++++++++	1
		+++++++++++++++++++++++++++++++++++++++	0
		<del>! . ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !</del>	- 0
		+++++++++++++++++++++++++++++++++++++++	2
		+++++++++++++++++++++++++++++++++++++++	
		+++++++++++++++++++++++++++++++++++++++	1

- - INCORRECT RESPONSE
- + CORRECT RESPONSE
- CIRCLED AREAS INDICATE AREAS NEEDING SPECIAL REVISION IN THE LEARNING STRATEGY

<sup>\*</sup> RESULTS TABULATED ON THE POST-INDICATED THAT NO FURTHER REVISION WAS NECESSARY.

TABLE 5

# INSULIN THERAPY\* CORRECT RESPONSE ANALYSIS - PRE-TEST

BEHAVIORAL OBJECTIVES	CRITERION MEASURES	CORRECT RESTORDE ANNETS TO TRE-TED	NUMBER OF INCORRECT
OBJECTIVES	(Incl 3-	RESPONSE ANALYSIS	RESPONSES**
1,2,3	1	++++-+-++-	6
		+++	9
		++++++	6
4	2	+-+++-+++	7
5	3	++++-+-	4
6	4	++++++++	5
7&8	5	+++++++++++++++	2
		+++++++++++++++	2
		++++++++++++	1
9	6	+++	and
10	7	++-++++-	9
11&12	8	+++++++++++++++	3
13	9	++-++++	7
14	10	++++++-++-	4
		+++++++++++++	1
		+++++++++++++	1
		-+-+-+-+	8
15,16,	11	++++++-++++	2
17,18,		++-+++++-	6
19, & 20		+++-+-+-	6
		++++++-+	5
		+++-+++++	7
		++++	
		++++-	(ID)
		+	14)
		+++++	9
		+	(13)
		+++-+++	8
		++++++++-	3
21	12	++++++++++++	2
		+++-++++	6
22	13	++++-++++	4

<sup>- =</sup> INCORRECT RESPONSE

<sup>+ =</sup> CORRECT RESPONSE

<sup>•</sup> CIRCLED AREAD INDICATE AREAS NEEDING SPECIAL REVISION IN THE LEARNING STRATEGY.

<sup>\*</sup>OUT OF THE THIRTY SUBJECTS, THERE WERE ONLY SIXTEEN SUBJECTS REQUIRING INSULIN THERAPY INSTRUCTION.

<sup>\*\*</sup> RESULTS TABULATED ON THE PRE-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

TABLE 6

## INSULIN THERAPY\* CORRECT RESPONSE ANALYSIS - POST-TEST

BEHAVIORAL OBJECTIVES	CRITERION MEASURES (Incl 3-	CORRECT RESPONSE ANALYSIS - POST-TEST RESPONSE ANALYSIS	NUMBER OF INCORRECT RESPONSES**
1	1	++++++++++++++	1
2&3	2	+++++-++-+++	3
		++++++++++	3
4,5,	3	+++++++++++	2
6,&7		++++++++++	3
		++++++++++++	0
		+++-++++++++	2
		+ + + + + + + - + + + + + + +	1
		++++++++++++	0
		+++++-+	3
		++-+++-+++	4
		++++-++	4
		++++++++++++	2
		+++++++++++	1
		+++++++++++	0
8,9,	4	++++-+-+	4
&10		-+++-+++++++	3
		+ - + + + + + + + + + + - +	2
		+++++++++-++-	2
11	5	++-++++++++++	2
12	6	++++++++++++	1
13	7	++++++++++++	0
14	8	++++++++++	3
15,16,	9	++-+-+++++++	3
&17		+++-++++-	4
		++-+++++	5
18	10	++++-+++-	4
19	11	+++++++++++++	0
20	12	+-+++++++++	2
21,22	13	+ - + + + + + + + + + +	3
		++++-+++++++	3
		+++++++++++++	1

<sup>-- =</sup> INCORRECT RESPONSE

<sup>+ =</sup> CORRECT RESPONSE

<sup>•</sup> CIRCLED AREAS INDICATE AREAS NEEDING
SPECIAL REVISION IN THE LEARNING STRATEGY

<sup>\*</sup>OUT OF THE THIRTY SUBJECTS, THERE WERE ONLY SIXTEEN SUBJECTS REQUIRING INSULIN THERAPY INSTRUCTION.

<sup>\*\*</sup>RESULTS TABULATED ON THE POST-TEST INDICATED THAT THERE WAS NO FURTHER NEED FOR REVISION.

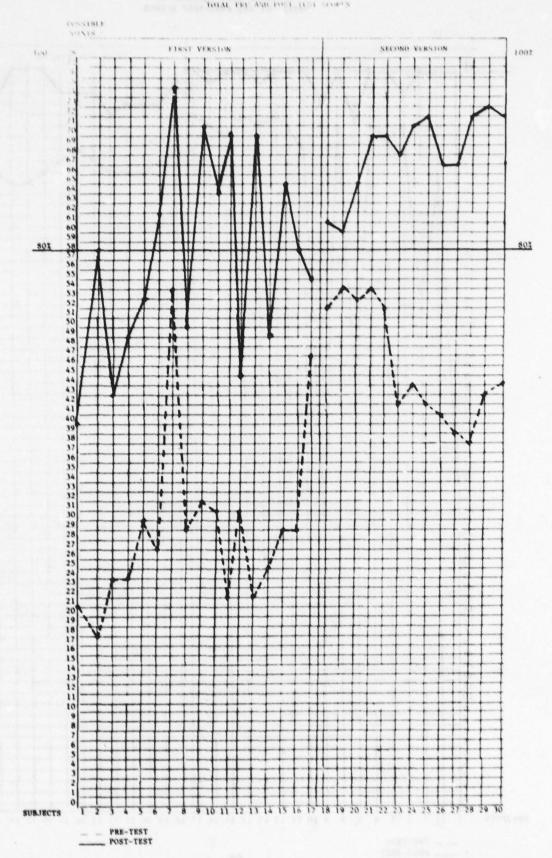
# DIAMILS MELLITUS TABULATION OF PROCESS EVALUATION

Tabulations Rating Scale

TIFM	The constitute to the little in the constitute of	THE REAL PROPERTY.	POINTON		*****
	0	0	26	3	1
Viewing Time	Ī	2	3	4	5
	Too Short		OK		Too Long
	0	0 2	25	4 4	1
Centent Interest	1	2	The second secon		5
	Bortng		OK	,	ascinating
	0	$\frac{1}{2}$	24	4	1 5
Questions on Topic	No Help		<u>3</u> ОК	Re	eally Helped
	1	2	27	0	0
Pace	Ī	$\frac{2}{2}$	3	4	5
	Too Slow		OK		Too Fast
	0	$\frac{0}{2}$	26	44	0
Content Uniqueness	1	2	3	4	5
	Old Stuff		OK		All New
	0	1	19	6	4
Content Value	No Value	2	OK	Mc Mc	st Valuable
Learning Laboratory	0	0	16	4	10
Technicians' Style	Ī	2	3	4	5
	Poor		OK		Excellent
11 0	0	0	16	4	10
Learning Center	Poor		OK OK	4	Excellent
Preference for	14		0	,	,
Instruction	1 1	2	3	4	5
	A/V Mode	-	Neutral	Li	ve Teacher
Freedom to learn by A/V com-	0	$\frac{3}{2}$	20	1	6
pared to usual instructions	Ī	-	3	4	5
by health workers	Less Freedo	n	Equal	Мо	re Freedom
Personal responsibilities for		,	20	6	
learning by A/V compared to usual instruction by health	0 1	$\frac{1}{2}$	$\frac{20}{3}$	4	5
workers	Less	-	Equal		More
Patient attitude toward A/V	0 1	1	11	12	6
modes for health education	THE RESIDENCE OF THE PARTY OF T	$\frac{1}{2}$	3	- Marian Marian Color	5
	Poor		Neutral		Excellent
Patient viewing of commercial	4	6 2	7	7 4	6
TV in hours during the day	Less Than	- 4	Hours	AND DESCRIPTION OF	More Than

TABLE 8

BEARTEN MELLIPS INCOMATION
TOTAL PRI AND POST 1131 SCORES



TARLE Q
DIABETIC DIET INFORMATION
TOTAL PHE AND POST-TEST SCORES

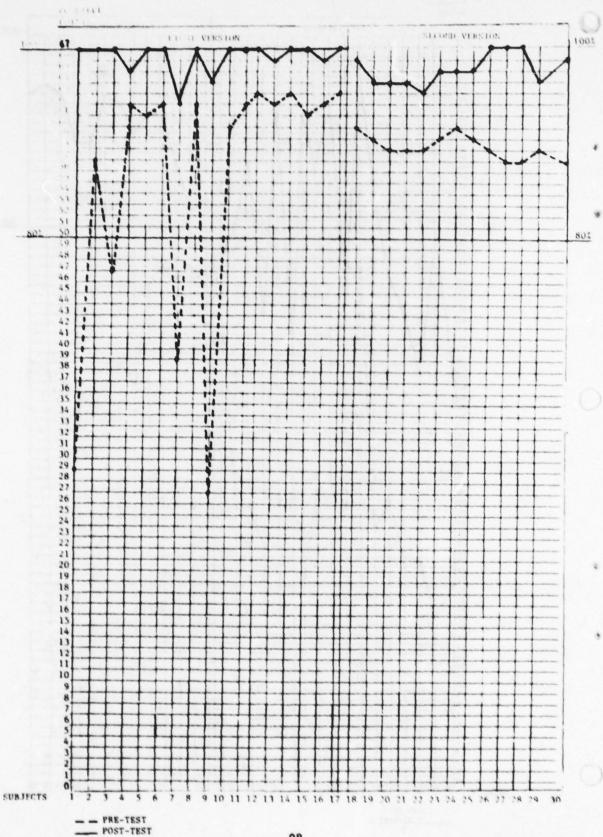


TABLE 10

# INSULIN THERAPY INFORMATION TOTAL PRE AND POST-TEST SCORES

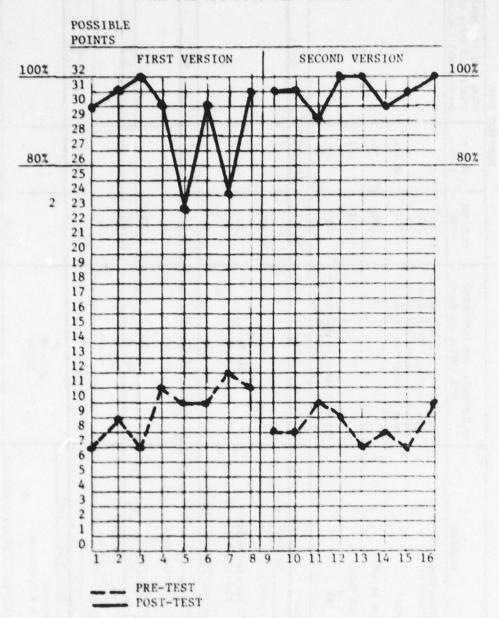


TABLE 11 DIABETES MELLITUS COST ANALYSIS

			RECURRENT	NT COST
HARDWARE	DEVELOPMENTAL AND INVESTMENT COSTS (Price per Unit)	COST PER HOUR	COST X 2 Hrs	TOTAL COST OF COMPLETE STRATEGY (3 Units of Instruction) 5 Hours
SONT: Video Tape Recorder TV Monitor	Price per unit no longer need- ed to be added. Initial in- vestment cost was annotated	\$0.147	3	N
Listening Center	lection.	.002	700.	· •/
DUKANE A/V Matic		.039	870.	
Maintenance	For each piece of equipment - 1c/Unit Hr	50.	.10	orico,
SUB-TOTAL	-0-	\$0.321	\$0.186	10.51
SOFTWARE				
PACOMED Script	0	\$0.032		
MEDFACT: Diabetes Mellitus Diabetic Skin & Foot Care	\$65.00	9,8		10
ADA: Acidosis & Insulin Reaction	2.65	.0002		
SUB-TOTAL	\$132.65	\$0.0522		\$0.05
MEDFACT: Diabetic Diet	\$65.00	10.08		
ADA: Food Exchange	2.65	.0002		
SUB-TOTAL	\$67.65	\$0.0102		\$0.01
MEDFACT: Insulin Therapy U-100 Insulin	\$65.00	10.08		
SUB-TOTAL	\$130.00	\$0.02		\$0.02
10				\$0.59
Aministrative Costs Developmental Typing & Reproduction	\$454.00 132.00		ibs	_T0G1
Paperwork to Individualize Strategy		\$0.10		\$0.10
SUB-TOIKI	\$586.00	\$0.10		\$0.10
707.41	\$916.30			\$0.69

### INCLOSURE 1

Diabetes Mellitus Learning System Objectives

#### DIABETES MELLITUS OBJECTIVES

- 1. Explain that diabetes is a condition that can be controlled.
- 2. Explain that diabetes is a condition that must be taken care of everyday.
- 3. Explain who gets diabetes.
- 4. Define diabetes in simple terms.
- 5. Explain the importance of diet.
- 6. Name three (3) main types of food the body gets energy from.
- 7. Define insulin and state its function (U-100).
- 8. Define oral drugs and state function.
- 9. Explain the importance of physical activity.
- Describe what steps to follow during an illness, infection, or severe emotional upset.
- 11. Describe why urine testing is important to the diabetic.
- 12. Explain urine testing for acetone.
- 13. Explain diabetic acidosis.
- 14. List the symptoms of diabetic acidosis.
- 15. Describe what to do for diabetic acidosis.
- 16. Explain insulin reaction.
- 17. List the symptoms of insulin reaction.
- 18. Describe what to do for an insulin reaction.
- 19. Explain the importance of having some form of medical identification.
- 20. Describe why proper skin care and proper care of the feet and hands are important to the diabetic.
- 21. List several foot conditions that should be brought to a physicians' attention.
- 22. Explain the importance of a yearly eye examination.

#### FOOD EXCHANGE LIST OBJECTIVES

- 1. Explain the types of food.
- 2. Explain food exchange lists.
- 3. Explain the importance of eating the exact amounts of food.
- 4. Explain what to watch for when purchasing canned or packaged foods.
- 5. Effectively plan menus using the exchange lists:
  - a) Milk exchanges
  - b) Vegetable exchanges
  - c) Fruit exchanges
  - d) Bread exchanges
  - e) Meat exchanges
  - f) Fat exchanges
  - g) Foods allowed as desired
  - h) Foods not on the exchange lists

#### SELF-INJECTION OF INSULIN OBJECTIVES

- Describe the physicians order regarding his/her insulin dose including kind, strength, number of units, timing, and where indicated, the use of the sliding scale.
- Specify that changes in the insulin dose should be ordered by or guided by the physician.
- Explain that there are different kinds and strengths of insulin; that the shape of the bottle and color of the label help to identify the different kinds.
- 4. Recognize that each insulin vial has a color coded cap to identify the strength and is stamped with an expiration date after which it should not be used.
- Recognize that insulin should be refrigerated but not frozen; that the vial in current use need not be refrigerated.
- 6. Recognize that there are different kinds of insulin syringes and that the syringe must "match" the insulin, e.g., a U-40 syringe should be used with U-40 insulin U-80 with the U-80 syringe U-100 with the U-100 syringe.
- 7. Recognize that the use of the dual-scale syringe is not recommended due to the great risk of grossly incorrect measurement.
- 8. Identify the three parts of the syringe.
- 9. Specify the angle of the needle when it is inserted and note how far it should be inserted.
- 10. Explain the significance of small air bubbles in the barrel of the syringe.
- 11. Recall whether a response is needed when there is a large air bubble in the barrel.
- 12. Describe how to clean the top of the insulin bottle.
- 13. Demonstrate how to fill the disposable syringe with the prescribed amount of insulin.

### SELF-INJECTION OF INSULIN OBJECTIVES Cont'd

- 14. Demonstrate how to fill the disposable syringe with the prescribed amount of insulin.
- 15. Demonstrate how to withdraw the needle from the insulin bottle.
- 16. Describe the steps in preparing the selected site for injection.
- 17. Demonstrate how to pinch the skin at the injection site.
- 18. Demonstrate the action of each hand for holding the syringe and pushing the plunger.
- 19. Describe the recommended pattern for rotation of injection sites.
- 20. Recognize the benefits of changing injection sites.
- 21. Specify that at least one other person should know how to give insulin when necessary.

### INCLOSURE 2

Initial Staff Evaluation Form

### INITIAL STAFF EVALUATION FORM

SUBJECT Diabetes Mellitus	TITLE Treatment of Diabetes Mellitus
WORKING TIME 10 Minutes	DATE PRODUCED 1975
FORMAT Filmstrip	DATE EVALUATED Aug 1975
PRODUCER MedFact, Inc.	PURCHASE/RENTAL SOURCE Same
Massillon, OH	
PRICE \$65.00  AVAILABILITY: CONTRACT PRODUCER OR CO SYNOPSIS Explains that diabetes mell plan, taking medications, a	OORDINATOR DIRECTLY.  litus can be controlled through a correct diet and proper skin care.
INTENDED AUDIENCE General (Adult/High OBJECTIVES Meet the learning system	School) behavioral objectives for Diabetes Mellitus.
PHOTOGRAPHY: POOR FAIR X GOOD SPECIAL STRENGTHS AND/OR WEAKNESSES	EXCELLENT  EXCELLENT  Needs all supplemental forms necessary to be tement, Demographic Data, Objectives, and
COULD THIS FORMAT WORK EFFECTIVELY BY EXPLAIN: With the above mentioned for	ITSELF? Yes orms it would be quite effective.
	EST BE USED AS A SUPPLEMENT TO OTHER INSTRUCTION?  X NO
POSITION: INSTRUCTIONAL DESIGNER	Westerd Scottberger Restricts

AHS FORM 15 (PACOMED) 25 Mar 1975

### INITIAL STAFF EVALUATION FORM

SUBJECT Diabetes Mellitus	TITLE Diabetic Diet
WORKING TIME 10 Minutes	DATE PRODUCED 1975
FORMAT Filmstrip	DATE EVALUATED Aug 1975
PRODUCER MedFact Inc.	PURCHASE/RENTAL SOURCE Same
Massillon, OH	10.2011-06
PRICE \$65.00  AVAILABILITY: CONTRACT PRODUCER OR COOR  SYNOPSIS Explains that to control dia  what you eat.	RDINATOR DIRECTLY. betes mellitus it is necessary to control
INTENDED AUDIENCE General (Adult/High Some OBJECTIVES Meet the learning system below)	chool) havioral objectives for Diabetes Mellitus.
TECHNICAL ASPECTS:  SOUND: POOR FAIR X GOOD PHOTOGRAPHY: POOR FAIR X GOOD  SPECIAL STRENGTHS AND/OR WEAKNESSES No effective, i.e., Privacy Act tests, and Demographic Data	eeds all supplemental forms necessary to be Statement, Behavioral Objectives, Pre/Post-
COULD THIS FORMAT WORK EFFECTIVELY BY ITEXPLAIN: With the above mentioned form	TSELF? Yes ms, it would work effectively.
YES_X	
EXPLAIN: This program would work well Mellitus Learning System.	as the diet track in the total Diabetes
POSITION: INSTRUCTIONAL DESIGNER	ANTONESS ASSESSMENTS ESTEEDS

AHS FORM 15 (PACOMED) 25 Mar 1975

#### INITIAL STAFF EVALUATION FORM

SUBJECT Diabetes Mellitus	TITLE Insulin Therapy
WORKING TIME 15 Minutes	DATE PRODUCED 1974
FORMAT Filmstrip	DATE EVALUATED 1975
PRODUCER MedFact Inc.	PURCHASE/RENTAL SOURCE Same
. Massillon, OH	
PRICE \$65.00  AVAILABILITY: CONTRACT PRODUCER OR COO  SYNOPSIS Explains the three types of Mellitus. Demonstrates how insulin and how to inject the  INTENDED AUDIENCE General (Adult/High	insulin used in the treatment of Diabetes to use the syringe with the appropriate ne insulin.
	objectives for the Diabetes Mellitus Learning
System,	
	EXCELLENT  EXCELLENT  Needs all forms to make the filmstrip an orms needed are the Privacy Act Statement.  ectives, and the Pre/Post-tests.
COULD THIS FORMAT WORK EFFECTIVELY BY I	TSELF? Yes
EXPLAIN: This filmstrip would work ef	fectively with the above mentioned forms.
COULD THIS SUBJECT/FORMAT (PACKAGE) BES	ST BE USED AS A SUPPLEMENT TO OTHER INSTRUCTION?
	track in the total Diabetes Mellitus
Learning System.	
POSITION: INSTRUCTIONAL DESIGNER	

AHS FORM 15 (PACOMED) 25 Mar 1975

### INCLOSURE 3

Diabetes Mellitus Instructional System Forms
a - n

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COMPONE SE (PACCHES)

### PRIVACY ACT STATEMENT (5USC 552a)

1. Authority for collection of information including Social Security Number:

Section 3012, Title 10, US Code.

2. Principal purposes for which information is intended to be used:

To assist medical research personnel in the monitoring of individual patient performance and in the evaluation of the PACOMED concept. The last four digits of the SSN identifies the patient and allows for computer consolidation, comparison, and retrieval of individual data, and cross reference with the outpatient record if required.

#### 3. Routine uses:

This information may be used in research pertaining to the planning and development of a prototype patient and community health staff education module; in the establishment of an objective and behavioral data bank; and in the development of appropriate medical instructional systems. Individual data may be used in analysis and discussion with other AMEDD personnel and consolidated in research reports for general release. No information that identifies any individual patient or physician will be released.

- 4. Providing of this information is voluntary but failure to provide will result in your exclusion from the research project.
- 5. The following forms are currently in use with this statement:

AHS Form 336	Demographic Data: Diabetes
Pre Test	Diabetes Information
Pre Test	Diabetic Diet Information
Pre Test	Insulin Treatment
Post Test	Diabetes Information
Post Test	Diabetic Diet Information
Post Test	Insulin Treatment
AHS Form 339	Demographic & Baseline Data: Diabetes
AHS Form 339b	Process Evaluation: Diabetes
AHS Form 339c	Three Month Follow-Up Data: Diabetes
AHS Form 339d	Six Month Follow-Up Data: Diabetes
Scale	Opinion Scale: Diabetes
Scale	Rotter's I.E. Scale
Scale	Nelson-Denny Scale

Demographic Data: Diabetes

INSTRUCTIONS: Please answer each item by supplying the correct information. If you have any questions, do not hesitate to ask the health educator.					
FUL	L. NAME			e i geo Thul	M
ADD	RESS (Stre	not)	(City)	(State)	(Zip
				(State)	(arp
TEL	EPHONE NUMBER	RS: Home	Work		
1.	Last four d	igits of sponsor's social se	ecurity no.		
2.	Date:	to it is smalle? I dead on an a			
3.	Patient's st	tatus: (Circle one of the f	following)		
	rucient 5 5	easing the and beautiful and the state of	Million Talk Second		
		Service Member I			
4.	Sponsor's Ra	ank/Status /	-		
5.	Sex:				
6.	Age last bir	rthday:			
0.					
7.	Occupation:				
8.	Marital Stat		Linds		
		Married:	Engaged:	BT Teef	
		Widowed:	Divorced:	Total Test	
		Single:	Separated:	seye'l 2004.	
9.	Education co	ompleted:		METOTO TOTAL	
		PERSONAL PROPERTY AND THE PROPERTY AND			
		Elementary School (1st-6th grade)	The second		

AHS Form 336 1 Dec 75

	High School (9th-12th grade)
	1 to 3 yrs college
	Baccalaureate Degree
	Master's Degree
	Doctor's Degree
). When were you diagnosed	a diabetic?
	Less than 3 mos.
	4 to 6 mos.
	7 to 12 mos.
	1 to 2 yrs.
	more than 2 wre

Demographic Data: Diabetes

### Diabetes Information

	Pre-test		
INSTRUCTIONS:	Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answers that statement. Mark a "\" on the line or lines in front of your answer(s).		
EXAMPLE:	Boston is the capital of		
	Connecticut		
	Massachusetts		
	Vermont		
1. Diabetes i	is a condition that must be taken care of:		
Eve	ery day		
On 1	ly for a short time		
Onl	ly when you feel sick		
2. Which of t	these statements are correct?		
You	can catch diabetes from someone else		
Dia	betes runs in families		
A11	members of a family with diabetes will have diabetes		
On 1	ly some members of a family with diabetes will have dia	betes	
Pec	ople are more likely to get diabetes if they are overwe	ight.	
3. When a per	son first gets diabetes, s/he may have symptoms of:		
	rst Skin infection		
Exc	essive urination Weight loss		
	thing Hunger		
	HINE	1	
		-	

D18	betes Information
4.	Diabetes is a condition in which there is not enough:
	Insulin
	in the blood to use properly the Sugar
	THE PARTY OF STANDARD WITH THE TANK OF TRACE TO THE THE TANK OF TH
	Insulin
	you get from the food you eat. As a result
	A whore the same and the managed , lowers to the wattewn
	Insulin
	builds up in the bloodSugar
5.	Who must work to control your diabetes?
	Only you
	Only your doctor
	Both you and your doctor
6.	Which of the following things could cause your blood to have too much sugar?
	Eating more food than your diet allows
	Eating less food than your diet allows
	Taking more medicine (insulin or oral drug) than your doctor tells you
	Taking less medicine (insulin or oral drug) than your doctor tells you
	Doing more physical activity than usual
	Doing less physical activity than usual
7.	Check the following situations that might cause your diabetes to get out of control:
	A sore throat A bad cold
	An infected cut Getting very angry or excited
	Trouble or death in the family A boil

### Diabetes Information

0.	Regular dental care for a person with diabetes is:	
	Important	
	Not important	
9.	An unusual amount of sugar in your urine indicates that your diabetes may be:	
	Improving, because you are getting rid of the extra sugar in your body.	•
	Getting out of control, because the sugar in your body is not being used properly.	
10.	Mr. Brown finds sugar and acetone in his urine. What should he do?	
	Stop taking insulin or oral drug	
	Call his doctor immediately	
	Take insulin or oral drug as usual	
	Eat as much as he can	
	Eat what is on his diet as usual	0
	Stop eating	
11.	Diabetic acidosis can be caused by:	
	Eating more food than your diet allows	
	Eating less food than your diet allows	
	Taking more medicine than your doctor tells you	
	Taking less medicine than your doctor tells you	•
	Exercising more than usual	
	Exercising less than usual	
	Illness, infection, or severe emotional upset	
	Following your doctor's instructions every day	



	eck the symptoms of	diabetic acidosis:	
	Excessive urina		
	Thirst		
	Weak, tired fee	ling	
	Nausea and vomit	ing	
	Flushing, dry sl	cin	
otto	Drowsiness		
	Deep, rapid brea	athing	
13. You	are more likely to	have an insulin reaction	if you:
	Do more physical	l activity than usual	
	Do less physical	l activity than usual	
	Take more medic:	ine (insulin or oral drug	) than usual
ed aga	Take less medic:	ine (insulin or oral drug	g) than usual
	Eat more food th	nan your diet allows	
_	Ear less food th	nan your diet allows	
14. Wh:	ich of the following	are symptoms of an insul	in reaction?
_	Hunger	Impatience	Sore throat
_	Diarrhea	Constipation	Blurred vision
_	Trembling	Crankiness	Difficulty in speaking
_	Vomiting	headache	0,00000

0



Cold sweat

Confused thinking

### Diabetes Information

15.	Which of reaction?	the follows	ing foods are ve	ry good for treating an insulin	C
	Re	gular cola	drink	Orange	
	Lo	w calorie o	range drink	Meat	
	Ap	ple juice	-	Hard candy	
	Car	rrot		Syrup	*
	Su	gar		Diabetic grape juice	
16.	Who should reaction?	d be carefu	11y instructed a	about how to treat an insulin	*
	You	ır immediat	e family		
	A &	stranger yo	u meet at a part	y	
	A c	lose frien	d		
	Pec	ple at wor	k you hardly eve	r see	
	A c	o-worker y	ou see daily		
17.	Some kind	of medical	identification	should be carried at all times by:	0
	Som	e diabetic	a vol. la statis muoi s		
	A11	diabetics			
18.	Indicate winsulin re		kes cause diabet	ic acidosis and which mistakes cause	
	Diabetic Acidosis	Insulin Reaction		Mistakes	*
			Taking too muc	h insulin	
		-	Not taking eno	ugh insulin	
			Not eating eve	rything on your diet	*
			Performing muc	n more physical activity than usual	
				doctor when you have an infection ss, or are under great emotional	



Dial	betes Information
19.	Some symptoms of uncontrolled diabetes come on quickly, but can be stopped quickly if the diabetic takes prompt action. These are the symptoms of:
	Diabetic acidosis
	An insulin reaction
20.	Some symptoms of uncontrolled diabetes come on more slowly, but can be avoided if the diabetic tests his/her urine regularly and carefully These are the symptoms of:
	Diabetic acidosis
	An insulin reaction
21.	The person with diabetes who follows his doctor's instructions carefully and takes care of him/herself every day can avoid:
	Diabetic acidosis
	An insulin reaction
22.	To prevent infection, you must take care of your skin:
	Every day
	Every week
23.	On the feet, the areas that need special attention are:
	Around the ankles
	On the soles
	Between the toes
24.	Which of the foot conditions below should be quickly brought to a doctor's attention?
	Cracks Calluses
	Colored spots Swelling
	Corns Cuts

Sores

#### DIABETES MELLITUS OBJECTIVES

- . Explain that diabetes is a condition that can be controlled.
- . Explain that diabetes is a condition that must be taken care of everyday.
- . Explain who gets diabetes.
- . Define diabetes in simple terms.
- . Explain the importance of diet.
- . Name three (3) main types of food the body gets energy from. '
- . Define insulin and state its function (U-100).
- . Define oral drugs and state function.
- . Explain the importance of physical activity.
- . Describe what steps to follow during an illness, infection, or severe emotional upset.
- . Describe why urine testing is important to the diabetic.
- . Explain urine testing for acctone.
- . Explain diabetic acidosis.
- . List the symptoms of diabetic acidosis.
- . Describe what to do for diabetic acidosis.
- . Explain insulin reaction.
- . List the symptoms of insulin reaction.
- . Describe what to do for an insulin reaction.
- . Explain the importance of having some form of medical identification.
- . Describe why proper skin care and proper care of the feet and hands are important to the diabetic.
- . List several foot conditions that should be brought to a physicians' attention.
- . Explain the importance of a yearly eye examination.

EDUCATIONAL INTERVENTION: DIABETES MELLITUS

#### Diabetes Information

	Post-test	
INSTRUCTIONS:	Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answers that statement. Mark an "X" on the line or lines in front of your answer(s).	٧
EXAMPLE:	Boston is the capital of	
	Connecticut	
	X Massachusetts	
	Vermont	
	the foot conditions below should be quickly brought to attention?	
Cra	cks Calluses	0
Co1	ored spots Swelling	
Cor	ns Cuts	
Sor	es	
2. On the fee	t, the areas that need special attention are:	
Aro	und the ankles	
On	the soles	2
Bet	ween the toes	
3. To prevent	infection, you must take care of your skin:	
Eve	ry day	
Eve	ry week	(
	with diabetes who follows his doctor's instructions and takes care of him/herself every day can avoid:	Post
Dia	betic acidosis	0
An	insulin reaction	0

Diabetic Information				
	D4 al	atta	Infor	mation

5.	Some symptoms of uncontrolled diabetes come on more slowly, but can be avoided if the diabetic tests his/her urine regularly and carefully. These are the symptoms of:
	Diabetic acidosis
	An insulin reaction
6.	Some symptoms of uncontrolled diabetes come on quickly, but can be stopped quickly if the diabetic takes prompt action. These are the symptoms of:
	Diabetic acidosis
	An insulin reaction
7.	Indicate which mistakes cause diabetic acidosis and which mistakes cause insulin reaction:
	Diabetic Insulin Acidosis Reaction Mistakes
	Taking too much insulin.
	Not taking enough insulin.
	Not eating everything on your diet.
	Performing much more physical activity than usual.
	Not calling a doctor when you have an infection or other illness, or are under great emotional stress.
8.	Some kind of medical identification should be carried at all times by:
	Some diabetics
	All diabetics



Dia	heti	Inf	orma	+1	on
Ula	u = L x	<b>1111</b>	OI IIIG		

9.	Who should be carefully instructed about h reaction?		
	Your immediate family		
	A strnager you meet at a party		
	A close friend		
	People at work you hardly ever see		
	A co-worker you see daily		
10.	Which of the following foods are very good reaction?	for treating an insu	lin
	Regular cola drink	Orange	
	Low calorie orange drink	Meat	
	Apple juice	Hard candy	
	Carrot	Syrup	
	Sugar	Diabetic grape juice	- 0
11.	Which of the following are symptoms of an	insulin reaction?	
	Hunger Impatience	Sore thro	at
	Diarrhea Constipation	Blurred v	ision
	Trembling Crankiness	Difficulty	y in
	Vomiting Headache	L Lucibes to body sec	
	Cold sweat Confused thinking	ng stradabb seed	٠
12.	You are more likely to have an insulin read	ction if you:	
	Do more physical activity than usua	1.	
	Do less physical activity than usua	1.	
	Take more medicine (insulin or oral	drug) than usual.	
	Take less medicine (insulin or oral	drug) than usual.	David
	Eat more food than your diet allows	•	Post
	Eat less food than your diet allows		0

13.	Check the symptoms of diabetic ac	idosis:
	Excessive urination	Flushing, dry skin
	Thurst	Drows iness
	Weak, tired feeling	Deep, rapid breathing
	Nausea and vomiting	
14.	Diabetic acidosis can be caused by	y: spo betoeint na
	Eating more food than your	diet allows.
	Eating less food than your	diet allows.
	Taking more medicine than y	your doctor tells you.
	Taking less medicine than y	your doctor tells you.
	Exercising more than usual.	Westing land total
	Exercising less than usual.	2) subother arms public.
	Illness, infection, or seve	ere emotional upset.
	Following your doctor's ins	structions every day.
15.	Mr. Brown finds sugar and acetone	in his urine. What should he do?
	Stop taking insulin or oral	drugs.
	Call his doctor immediately	To the sum include control for
	Take insulin or oral drugs	as usual.
	Eat as much as he can.	
	Eat what is on his diet as	usual.
	Stop eating.	
16.	An unusual amount of sugar in your may be:	urine indicates that your diabetes
	Improving, because you are your body.	getting rid of the extra sugar in
	Getting out of control, bec	ause the sugar in your body is not

Diabetic Information

	The state of the s
17.	Regular dental care for a person with diabetes is:
	Important
	Not important
18.	Check the following situations that might cause your diabetes to get out of control:
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	An infected cut Getting very angry or excited
	Trouble or death in the family A boil
19.	Which of the following things could cause your blood to have too much sugar?
	Eating more food than your diet allows.
	Eating less food than your diet allows.
	Taking more medicine (insulin or oral drug) than your doctor tells you.
	Taking less midicine (insulin or oral drug) than your doctor tells you.
	Doing more physical activity than usual.
	Doing less physical activity than usual.
20.	Who must work to control your diabetes?
	Only you
	Only your doctor
	Both you and your doctor
21.	Diabetes is a condition in which there is not enough:
	Insulin in the blood to use properly the Sugar
	Insulin you get from the food you eat. As a result Post
	Sugar at manual and same and s
	Insulin builds up in the blood.

22.	When a person first gets diabetes	, he may have symptoms o	i:
	Thirst	Skin infection	
	Excessive urination	Weight loss	
	Weakness and tiredness	Hunger	
	Itching		
23.	Which of these statements are corr	ect?	
	You can catch diabetes from	someone else.	
	Diabetes runs in families.		
	All members of a family wi	th diabetes will have di	abetes.
	Only some members of a fam	ly with diabetes will h	ave diabetes
	People are more likely to g	et diabetes if they are	overweight.
24.	Diabetes is a condition that must	be taken care of:	
	Every day		
	Only for a short time		
	Only when you feel sick		



		re-test
Exchange Lists when have more than one or choices best ans		en needed. The statements listed may be correct answer. Decide which choice answers that statement. Mark a "/" on in front of your answer(s).
EXAMPLE:	Boston is the cap	ital of
	Connecticu	t s dalo ultoni a To etector III
	/ Massachuse	tts
	Vermont	
1. Check whet carbohydra		w is a sugar carbohydrate or a starchy
Sugar Carbohydra	Starchy ate Carbohydrate	sects on to a set wind
		Candy
		Orange juice
		English muffin
		Strawberry jam
		Cherries
		Sweet potato
-		Tangerine
		Corn flakes
		Maple syrup
		Peas
		Pr

2.	There is only one situation in which a diabetic wants his/her blood sugar to rise immediately. That situation is:
	Diabetic acidosis
	Insulin reaction
3.	If you need sugar in a hurry, it would be best to eat which one of the following:
	A starchy carbohydrate
	A fat
	A sugar parbohydrate
	A protein
4.	Look at your Food Exchange Lists. In the blanks below, write the number of exchanges used for each portion of food:
	toup of orange juice equals fruit exchange(s).
	2 eggs equal meat exchange(s).
	2 slices of toast equal bread exchange(s).
	3 teaspoons of butter equal fat exchange(s).
	1 cup of carrots equals vegetable exchange(s).
	1 cup of whole milk equals milk exchange(s).
5.	You should not eat canned or frozen foods when the labels say:
	"Sugar added"
	"No sugar added"
	"Dextrose added"
	"Sucrose added"

6.	Check below the amounts in each group that you should eat using 1 Fruit Exchange:	6
	1 small apple	
	1 medium size apple	
	l large apple	,
	1/4 cup of grapefruit juice	
	1/2 cup of grapefruit juice	
	3/4 cup of grapefruit juice	
	1 cup of grapefruit juice	
	1 small tangerine	
	1 medium tangerine	
	l large tangerine	
7.	For each Milk Exchange you use on skim milk, when you are allowed whole milk or your meal plan, you must add two exchanges to your meal from:	
	List 1 List 3 List 5	
	List 2 List 4 List 6	
8.	Look at the Vegetable Exchange List. If you ate ½ cup of eggplant, that would be counted as:	٠
	1 A Vegetable Exchange	
	1 B Vegetable Exchange	
	If you ate ½ cup of lettuce, radishes, or celery, that would be counted as:	
	1 A Vegetable Exchange	
	1 B Vegetable Exchange	

8.	cont'd				
	If you are 1 cup of let counted as:	tuce, radishes, or ce	lery, that would be		
	1 A Vegetable Ex	change			
	1 B Vegetable Ex	change			
	2 A Vegetable Ex	changes			
	2 B Vegetable Ex	changes			
	If you ate ½ cup of carrots and ½ cup of peas mixed together, that would be counted as:				
	1 A Vegetable Ex	change			
	1 B Vegetable Exchange				
	2 A Vegetable Ex	changes			
	2 B Vegetable Ex	changes			
9.	Look at the Bread Excha belong to the Bread Exc		foods listed below that		
	Carrots	String beans	Nuts		
	Peas, dried	Baked beans	Graham crackers		
	Eggplant	Potatoes	Whipped cream		
	Corn	Sponge cake	Ice cream		
10.		g foods, how much coul	to use 2 Meat Exchanges d you have? (Write your		
	Liverwurst	Peanut butter	Sardines		
	Frankfurter	Swiss cheese	Baked ham		
	Ground beef	Clams	American theese		
			Chicken		

	ecte prot intormacion				
11.	Look at the Fat Exchange list because:	List. All of these fo	oods are on the same		
	They are favorite	foods			
	They are used main	nly on bread			
	They all have about	ut the same food value			
12.	You should follow the same for foods not found on the				
	Eat them in small	quantities			
	Eat as much of the	em as you want			
	Not eat them until to fit them into	l your doctor or a diet your meal plan	itian tells you how		
13.	Look at John's breakfast meal plan:				
	1 Fruit Exchange 1 Meat Exchange 2 Bread Exchanges 2 Fat Exchanges 1 Milk Exchange				
	Plan a breakfast for John each food listed:	. Fill in the amount	he should eat opposite		
	Prunes	Butter	Bread		
	Dry cereal	_ Soft boiled egg	Milk		
14.	Which methods of cooking from the exchanges allowed		se you to subtract		
	Baking	Seasoning or basti	ng Thickening		
	Roasting	Steaming	Seasoning with spices & herbs		
	Frying in fat	Boiling	spaces a nerva		
		DO TT THE			

Broiling

### Diabetic Diet Information CAMONAL FERROSS

15.	Check those foods below that them:	can be used in a recipe without measuring			
	Diced chicken	Cooked rice Clear broth			
	Mushrooms	Tomato WEIRGIG STAFF to mellelemon sent			
	Green pepper	Celery Prof to began add minigate			
16.	To keep your diabetes under	control, you should never:			
	Skip a meal				
	Make up a meal by eating two meals at once				
	Eat the amount on the	meal plan			
	Postpone a meal				
	Eat more than your die	et allows sagnadam aldasaguV (d			
	Eat less than your die	et allows pognodore afert (5			

### FOOD EXCHANGE LIST OBJECTIVES

- . Explain the types of food.
- . Explain food exchange lists.
- . Explain the importance of eating the exact amounts of food.
- . Explain what to watch for when purchasing canned or packaged foods.
- . Effectively plan menus using the exchange lists:
  - a) Milk exchanges
  - b) Vegetable exchanges
  - c) Fruit exchanges
  - d) Bread exchanges
  - e) Meat exchanges
  - f) Fat exchanges
  - g) Foods allowed as desired
  - h) Foods not on the exchange lists

PROJECT: PACONED
HEALTH CARE STIDIES DIVISION
ACADEMY OF HEALTH SCHWILLS
HORS & ON BURGION THEAS

Disecto Piet information

Read each statement carefully. Refer to the Eopd Exchange Liage when meeded. The entrements listed may have more than one correct enswer. Decide which cooles or abolesables newers that storest. Mark an "en

Boncon is the cautent of

EDUCATIONAL INTERVENTION: DIABETIC DIET

To keep your disserce under control, you should never:

Make up a meat by eating two needs at once

. Est the emount on the meal plan

and the second

swolfs telb dwow made seet all

Check shows loads below that can be used in a racipe without

ness statem Chalad (16) Control

Office T. Control of the Control of

Green pepper Colory

135

3-1

8

	Post-test	
INSTRUCTIONS:	Read each statement carefully. Refer to the Food Exchange Lists when needed. The statements listed may have more than one correct answer. Decide which choice or choices best answers that statement. Mark an "X" on the line or lines in front of your answer(s).	
EXAMPLE:	Boston is the capital of	
	Connecticut	
	X Massachusetts	
	Vermont	
Sk1	p a meal e up a meal by eating two meals at once the amount on the meal plan	0
Pos	tpone a meal	
Eat	more than your diet allows	
Eat	less than your diet allows	8
2. Check those measuring	e foods below that can be used in a recipe without them:	
Dice	ed chicken Cooked rice Clear broth	,
Musi	hrooms Tomato	
Gree	en pepper Celery	

3.		Which methods of cooking listed below would cause you to subtract from the exchanges allowed on your meal plan?				
	from the exchanges allowed on your	meal plan?				
	Baking Seaso	oning or basting Thickening fat	ng			
	Roasting Steam	Ming Seasonin spices &				
	Frying in fat					
	Boiling	.ng				
4.	4. Look at John's breakfast meal plan:					
	1 Fruit Exchange 1 Meat Exchange					
	2 Bread Exchanges 2 Fat Exchanges					
	1 Milk Exchange					
	Plan a breakfast for John. Fill in each food listed:	Plan a breakfast for John. Fill in the amount s/he should eat opposite each food listed:				
	Prunes Butter	Bread				
	Dry cereal Soft boil	led egg Milk				
5.	<ol><li>You should follow the same rule for for foods not found on the exchange</li></ol>					
	Eat them in small quantities					
	Eat as much of them as you wa	ant the same of th				
	Not eat them until your doctor to fit them into your meal pl	or or a dietitian tells you how lan				
6.	<ol> <li>Look at the Fat Exchange List. All list because:</li> </ol>	of these foods are on the same				
	They are favorite foods					
	They are used mainly on bread	d				
	They all have about the same	food value				
	and tradinged backs app longer who					

	answer in the bla	nks provided.)	
	_ Liverwurst _	Peanut butter	Sardines
#80/g	Frankfurter	Swiss cheese	Baked ham
	Ground beef	Clams	American cheese
			Chicken
	at the Bread Exchang to the Bread Ex		foods listed below that
	Carrots	String beans	Nuts
	Peas, dried	Baked beans	Graham crackers
90 3a	Eggplant	Potatoes	Whipped cream
	Corn	Sponge cake	Ice cream
that	would be counted a	as: balled field	
m <u>1,(a)</u>	thlunds you		
If yo	1 B Vegetable Ex		ery, that would be
If yo	1 B Vegetable Export ate 1/2 cup of lested as:	cchange ttuce, radishes, or cel	ery, that would be
If yo	1 B Vegetable Export ate 1/2 cup of lested as:	cchange ctuce, radishes, or cel cchange	ery, that would be
If yo	1 B Vegetable Export ate 1/2 cup of lest ted as:  1 A Vegetable Export at 1 B	cchange ctuce, radishes, or cel cchange cchange ctuse, radishes, or cel	ery, that would be
If yo	1 B Vegetable Export ate 4 cup of less ted as:  1 A Vegetable Export age 1 cup of less ted age 1 cup of less t	cchange ctuce, radishes, or cel cchange cchange ctuse, radishes, or cel	ery, that would be
If yo	1 B Vegetable Extended as:  1 A Vegetable Extended as:  1 B Vegetable Extended as:	cchange	ery, that would be
If yo count	l B Vegetable Export ate la cup of les ted as:  l A Vegetable Export age 1 cup of les ted as:  l A Vegetable Export age 1 cup of les ted as:  l A Vegetable Export age 1 b Vegetable Export age 1 cup of les ted as:	cchange	ery, that would be egetable Exchanges
If yo count	l B Vegetable Export at la Vegetable Export age 1 cup of letted as:  1 A Vegetable Export age 1 cup of letted as:  1 A Vegetable Export age 1 cup of letted as:	cchange 2 A Ve	ery, that would be egetable Exchanges

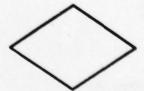
10.	For each Milk Exchange you use on skim milk, when you are allowed whole milk or your meal plan, you must add two exchanges to your meal from:
	List 1 List 3 List 5
	List 2 List 4 List 6
11.	Check below the amounts in each group that you should eat using 1 Fruit Exchange:
	l small apple
	1 medium size apple
	l large apple
	1/4 cup of grapefruit juice
	1/2 cup of grapefruit juice
	3/4 cup of grapefruit juice
	1 cup of grapefruit juice
	1 small tangerine
	1 medium tangerine
	1 large tangerine
12.	You should not eat canned or frozen foods when the labels say:
	"Sugar added"
	"No sugar added"
	"Dextrose added"
	"Sucrose added"

13.		Lists. In the blanks below, write the reach portion of food:	0
	's cup of orange juice equals	s fruit exchange(s).	
	2 eggs equal meat excl	hange(s).	
	2 slices of toast equal	_ bread exchange(s).	
	3 teaspoons of butter equal	fat exchange(s).	,
	1 cup of carrots equals	vegetable exchange(s).	
	1 cup of whole milk equals	milk exchange(s).	
14.	If you need sugar in a hurry of the following:	y, it would be best to eat which one	
	A starchy carbohydrau	te estat slepterate to ope Wil	
	A fat		
	A sugar carbohydrate		
	A protei		
15.	There is only one situation sugar to rise immediately.	in which a diabetic wants his blood	0
	Diabetic acidosis		
	Insulin reaction		
16.	Check whether each food belocarbohydrate:	ow is a sugar carbohydrate or a starchy	
	Sugar Starchy		
	Carbohydrate Carbohydrate		
		Candy "Salana Salan Madd"	
	•	Orange juice	
		English muffin	
		Strawberry jam	
		Cherries	_
		Sweet potato	
		Tangerine	
		Corn flakes	10
		Maple syrup	17
		Peas	Post

# PROJECT: PACOMED HEALTH CARE STUDIES DIVISION ACADEMY OF HEALTH SCIENCES FORT SAM HOUSTON, TEXAS 78234

# Insulin Treatment

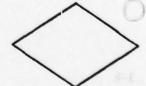
	Pre-test		
INSTRUCTIONS:	Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answer that statement. Mark an "X" on the line or lines in front of your answer(s).		
EXAMPLE:	Boston is the capital of:		
	Connecticut		
m the ville; char the	X Massachusetts Vermont		
or insulin	ettles have colored caps to indicate the particular strengt in that vile. Match the following colors with the corre- trengths of insulin.		
U-100	1. Red		
U-80	2. Orange 3. Green		
U-40	the could be by termy therefore proceed with the		
2. At what an	gle should the needle be inserted?		
45°	60°90°		
<ol> <li>If you don the dosage</li> </ol>	't feel a need for a full dose of insulin, you can adjust		
	True False		
4. The top of can be done	the insulin vile must be cleaned before each use. This by:		
Rubb	oing the cap with a clean cloth.		
Wipi	ing the cap clean with soap and water.		
	ing the cap clean with alcohol.		



Insulin Treatment

5. Label the parts of the syringe.

A	B. it lasique eds at occ.ed islandars	
6.	A large bubble in the syringe (as the insulin is drawn) means that:	
	You must clear the syringe by injecting back into the vile, the air and a small amount of insulin, to insure that the air has been removed.	
	The proper amount of insulin has not been drawn. You should continue to draw more insulin to make up for the space taken by the bubble.	
7.	What does blood in the syringe mean when injecting insulin?	
	The needle is inserted into the blood vessel; remove it, and inject again in another area.	
	The needle is properly inserted; proceed with the injection.	
8.	Some types of insulin are cloudy or milky and if left to stand for a period of time, sediment will form at the bottom of the vile. How do you mix this type of insulin for use?	
	Shake it. hand to sack the set base a last a mot boy it.	
	Tip it repeatedly, upside down/rightside up.	
	Roll it in your hands.	
9.	Indicate with a mark (†) the amount of insulin you will draw in the syringe pictured below, if told by your doctor to draw 30 units of U-40 insulin.	



#### Insulin Treatment

10. List in order the steps to draw insulin.

\_\_\_\_ Insert needle into vile.

\_\_\_\_ Inject air into vile.

\_\_\_\_ Draw air into syringe.

Draw insulin into syringe.

11. Indicate, with an "X", the areas best suited for insulin injection.





12. How should the needle be removed (pulled out)?

Slowly

Quickly

Same angle as entry

Different angle from entry

13. Some syringes have been marked for both U-40 and U-80 insulin. These syringes are very safe to use because you will always have the correct syringe for any type of insulin.

True

False



PROJECT: PACOMED
HEALTH CARE STUDIES DIVISION
ACADEMY OF HEALTH SCIENCES
FORT SAM HOUSTON, TEXAS 78234

#### SELF-INJECTION OF INSULIN OBJECTIVES

Upon completion of this program the patient will be able to:

- Describe the physicians order regarding his/her insulin dose including kind, strength, number of units, timing, and where indicated, the use of the sliding scale.
- . Specify that changes in the insulin dose should be ordered by or guided by the physician.
- Explain that there are different kinds and strengths of insulin; that the shape of the bottle and color of the label help to identify the different kinds.
- . Recognize that each insulin vial has a color coded cap to identify the strength and is stamped with an expiration date after which it should not be used.
- . Recognize that insulin should be refrigerated but not frozen; that the vial in current use need not be refrigerated.
- . Recognize that there are different kinds of insulin syringes and that the syringe must "match" the insulin, e.g., a U-40 syringe should be used with U-40 insulin U-80 with the U-80 syringe U-100 with the U-100 syringe.
- . Recognize that the use of the dual-scale syringe is not recommended due to the great risk of grossly incorrect measurement.
- . Identify the three parts of the syringe.
- . Specify the angle of the needle when it is inserted and note how far it should be inserted.
- . Explain the significance of small air bubbles in the barrel of the syringe.
- . Recall whether a response is needed when there is a large air bubble in the barrel.
- . Describe how to clean the top of the insulin bottle.
- . Demonstrate how to fill the disposable syringe with the prescribed amount of insulin.

#### SELF-INJECTION OF INSULIN OBJECTIVES Cont'd

- . Demonstrate how to fill the disposable syringe with the prescribed amount of insulin.
- . Demonstrate how to withdraw the needle from the insulin bottle.
- . Describe the steps in preparing the selected site for injection.
- . Demonstrate how to pinch the skin at the injection site.
- . Demonstrate the action of each hand for holding the syringe and pushing the plunger.
- . Describe the recommended pattern for rotation of injection sites.
- . Recognize the benefits of changing injection sites.
- . Specify that at least one other person should know how to give insulin when necessary.

(This will have to be modified according to what is and what is not provided the patient.)

EDUCATIONAL INTERVENTION: U-100 INSULIN

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PROJECT: PACOMED
HEALTH CARE STUDIES DIVISION
ACADEMY OF HEALTH SCIENCES
FORT SAM HOUSTON, TEXAS 78234

# Insulin Treatment Post-test

INSTRUCTIONS:	Read each statement carefully. The statements listed may have more than one correct answer. Decide which		
	choice or choices best answer that statement. Mark an "X" on the line or lines in front of your answer(s).		
EXAMPLE:	Boston is the capital of:		
	Connecticut		
	X Massachusetts		
	Vermont Vermont		
syringe fo	er any type of insulin.		
Fall	13. Insulin berike have colored each to indicate the past		
2. How should	the needle be removed (pulled out)?		
S1c	Same angle as entry		
Qui	ckly Different angle from entry		
3. Indicate,	with an "X", the areas best suited for insulin injection.		







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#### Insulin Treatment

9. Label the parts of the syringe.

		40 /310 /314 / 410 mints			
۸	barall amangans	B	. c.	NSTRUCTONS Re	
10.		nsulin vile must		e each use. This	
	Rubbing t	he cap with a cle	an cloth.		
	Wiping th	e cap clean with	soap and water.		
	Wiping the cap clean with alcohol.				
11.	If you don't feel a need for a full dose of insulin, you can adjust the dosage.				
	The state of the s	True			
12.	At what angle she	ould the needle b	e inserted?		
	45°	60°	90°		
13.	of insulin in the	at vile. Match t	he following colo	particular strength rs with the corre-	
	U-100	1. Red			
	U-80	2. Orange 3. Green			



#### Insulin Treatment

1110	OLLI TEGEMENT
4.	List in order the steps to draw insulin.
	Insert needle into vile.
	Inject air into vile.
	Draw air into syringe.
	Draw insulin into syringe.
5.	Indicate with a mark (†) the amount of insulin you will draw in the syringe pictured below, if told by your doctor to draw 30 units of U-40 Insulin.
6.	Some types of insulin are cloudy or milky and if left to stand for a period of time, sediment will form at the bottom of the vile. How do you mix this type of insulin for use?
	Shake it.
	Tip it repeatedly, upside down/rightside up.
	Roll it in your hands.
7.	What does blood in the syringe mean when injecting insulin?
	The needle is inserted into the blood vessel; remove it, and inject again in another area.
	The needle is properly inserted; proceed with the injection.
8.	A large bubble in the syringe (as the insulin is drawn) means that:
	You must clear the syringe by injecting back into the vile,



air has been removed.

by the bubble.

the air and a small amount of insulin, to insure that the

The proper amount of insulin has not been drawn. You should continue to draw more insulin to make up for the space taken

#### INCLOSURE 4

Formative Evaluation: Patient Version

#### PROJECT: PACOMED HEALTH CARE STUDIES DIVISION ACADEMY OF HEALTH SCIENCES FORT SAM HOUSTON, TEXAS 78234

FORMATIVE EVALUATION: PATIENT VERSION

1.	Date:	
2.	Patient's Name:	
3.	Age: moltawrolmi smillion seredain risveso	
4.	Social Security Number:	
5.	Race or Ethnicity:	
6.	Sex: another use to the training add grants	
7.	Education, Completed:	
8.	Occupation:	
9.	Program Title:	
10.	Evaluator:	
la t	tructions: This form is to be filled out in a personal interview with the patient works the program. The interviewer should make a special entire the patient at ease and explain that we are testing the program, NOT To	ffort to

The results of these tests will be kept private and will only be seen by those concerned with this project.

#### **OPERATIONAL DEFINITIONS:**

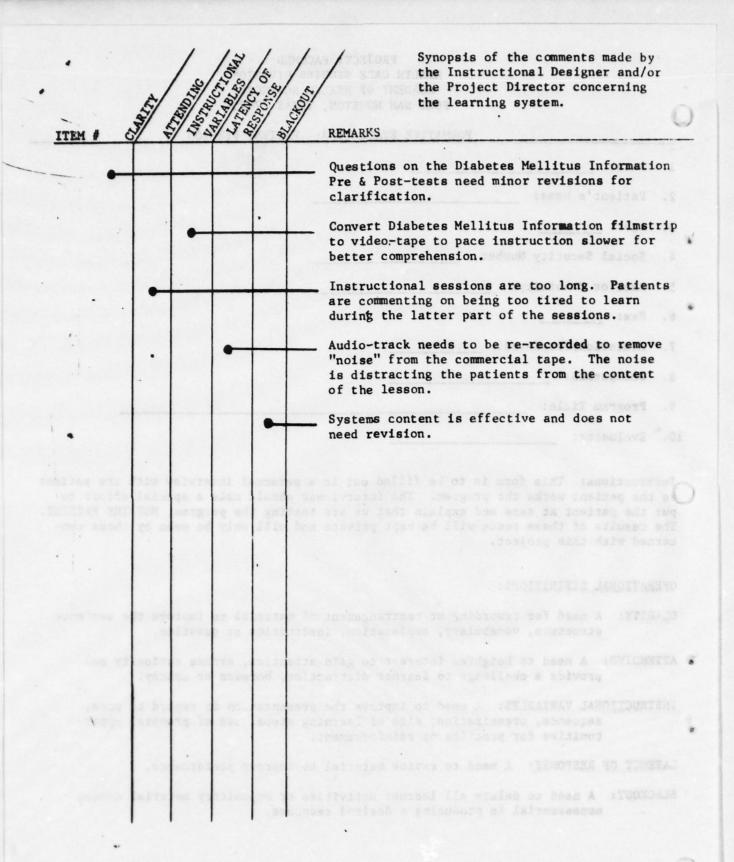
CLARITY: A need for rewording or rearrangement of material to improve the sentence structure, vocabulary, explanation, instruction or question.

ATTENDING: A need to heighten interest to gain attention, arouse curiosity and provide a challenge to learner distraction, boredom or apathy.

INSTRUCTIONAL VARIABLES: A need to improve the presentation in regard to pace, sequence, organization, size of learning steps, use of prompts, opportunities for practice or reinforcement.

LATENCY OF RESPONSE: A need to revise material to improve performance.

BLACKOUT: A need to delete all learner activities or expository material deemed nonessential in producing a desired response.



#### INCLOSURE 5

Physician Evaluation Form

PROJECT: PACOMED
HEALTH CARE STUDIES DIVISION
ACADEMY OF HEALTH SCIENCES
FORT SAM HOUSTON, TEXAS 78234

PHYSICIAN EVALUATION FORM		
DATE OCH 15 1975	FORMAT	
SUBJECT DM EVALUATION EVALUATOR DA VARELA	TITLE Protection Ministeries	
IS THE SUBJECT COVERED COMPLETELY?		
WHAT WOULD YOU ADD?		

WHAT WOULD YOU DELETE?

Kithing

IS THE CONTRACT ORGANIZED PROPERLY? (IET IF NOT, HOW WOULD YOU CHANGE THE SEQUENCE?

ARE ALL THE CRUCIAL OBJECTIVES EMPHASIVE CHEMAS AND LIVE EFFECTIVELY WITH HIS DISEASE OR PROBLEM.

IF NOT, PLEASE ELABORATE.

ARE FAMILIAR SYMBOLS AND CONCEPTS USED TO HELP EXPLAIN UNFAMILIAR SUBJECT MATTER?

1100

0

FOR WHAT PATIENT POPULATION WOULD YOU RECOMMEND THIS PRESENTATION?

adult population in general

DO YOU FEEL THE PRESENTATION IS TOO LONG, TOO SHORT AND WHY?

just ADE QUATE

#### INCLOSURE 6

Final Staff Evaluation

# PROJECT: PACOMED HEALTH CARE STUDIES DIVISION ACADEMY OF HEALTH SCIENCES FORT SAM HOUSTON, TEXAS 78234

# FINAL STAFF EVALUATION

SUBJECT: _	Diabetes Mellitus	Diabetes Information, Diabetic Diet TITLE: Insulin Therapy, ADA Workbook
WORKING TIM	E: 3 Hours	DATE PRODUCED: 1975
FORMAT: V	ideo-tape	DATE EVALUATED: Oct 1975
PRODUCER:	PACOMED, MedFact, America	n Diabetic Association (ADA)
PRICE: See	Cost Analysis, Table 11,	INTENDED AUDIENCE: General Adult
SYNOPSIS:		and what causes it. Describes how it is can lead a normal life through proper
OBJECTIVES:	Met basic requirements o	f the learning system behavioral objectives.
Post-tests,	Demographic Data, and Beh	21.08 shall738
DEFINITION	OF SELF-INSTRUCTIONAL FEAT	URES
PRE-TEST		the beginning of the instructional system try level (prior knowledge) of the material
OBJECTIVES	Description of what the completion of the lear	he subject will be able to do upon successful rning system.
PRACTICE	Questions or tasks in the instructional system similar to the criterion measures.	
POST-TEST		the conclusion of the instructional system ct has learned the intended information.
FEEDBACK	Initial reactions to the instructional system by the patient (interviewed comments).	
ATTITUDE		otions, or attitudes towards the instruc- concepts and contents.

PLEASE TURN PAGE

Self-instructional Features	1st Version	2nd Version
Pre-test		
Diabetes Mellitus	0 of 17 passed.	4 of 13 passed.
Diabetic Diet	13 of 17 passed.	13 of 13 passed.
Insulin Therapy	0 of 6 passed.	0 of 10 passed.
Objectives	See Behavioral Objectives	
Practice	See Instructional System	
Post-test Diabetes Mellitus	6 of 17 passed.	12 of 13 passed.
Diabetic Diet	14 of 17 passed.	12 of 13 passed
Insulin Therapy	4 of 6 passed.	10 of 11 passed.
Feedback	See Formative Evaluation	
Attitude Scale	See Process Evaluation	
	6.	
TECHNICAL ASPECTS:	Fair Good Excellen	1939 NO 2
Sound:		02370) 15880 <u>83</u> (71209160
Photography:		Tanat Sales

MATRIX FOR FIELD IMPLEMENTATION

TITLE: Diabetes Mellitus

TRACK	PRODUCER	COPYRIGHT	PHOTOGRAPHY	SOUND	SCRIPT	RECOMMENDATIONS
Diabetes Mellitus	MedFact	N/A	м/е	N/A	N/A	Purchase the filmstrip and use as it is now produced.
Diabetic Skin Care	MedFact	N/A	N/A	N/A	N/A	Purchase the filmstrip and use as it is now produced.
Diabetic Diet	MedFact	N/A	N/A	N/A	N/A	Purchase the filmstrip and use as it is now produced.
Food Exchange List & Diabetes Informa- tion	American Diabetic Associa- tion	N/A	N/A	N/A	N/A	Purchase the workbook as it is now produced.
Insulin Therapy	MedFact	N/A	N/A	N/A	N/A .	Purchase the filmstrip and use as it is now produced.

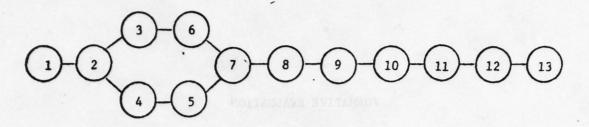
#### APPENDIX 3

FORMATIVE EVALUATION

Weight Control

PRECEDING PAGE HLANK

# SUMMARY NETWORK OF INSTRUCTIONAL DESIGN FOR WEIGHT CONTROL



#### EVENT IDENTIFICATION

- 1. Topic Selected: Weight Control
- 2. Met with Content Consultant, p. 163.
- 3. Develop Behavioral Objectives, p. 163.
- 4. Conduct "Real World" Search for Existing Educational Software on Weight Control, p. 163.
  - 5. Evaluate Existing Educational Software, p. 163.
  - 6. Write Criterion Measures (Pre-test Post-test), Incl 3-c,g,h, & j.
  - 7. Design Instructional System. (See Instructional System for Weight Control, p. 163, Incl 3-a thru n.
  - 8. Conduct Formative Evaluation, p. 164 (See Formative Evaluation Form, Incl 4.)
  - 9. Data Collection, p. 164.
- Revisions, p. 167.
- 11. Conduct Physician Evaluation, p. 167 (See Physician Evaluation Form, Incl 5.)
- 12. Cost Analysis, p. 167.
- 13. Final Staff Evaluation. p. 167 & Incl 6, Final Staff Evaluation Form.

#### 1. INTRODUCTION.

a. The following is a chronological representation of the systems approach to instructional design after the topic selection was made. Each event, as it appears in the Summary Network of the Instructional Design (p. 162), will be discussed in detail (Refer to corresponding numbers in the summary.) to give the proper perspective of the total developmental process.

# (2) Initial Contact With the Content Consultant.

(a) In November 1975, the Instructional Designer met with the Content Consultant to outline the behavioral objectives for the instructional learning system on Weight Control.

#### (3) Behavioral Objectives.

(a) The Weight Control behavioral objectives are statements of tasks that the patient will be able to perform upon successful completion of the learning system. This system has been divided into two parts, see Inclosure 1-a and 1-b, page 176, for a list of these objectives.

#### (4) "Real World" Search.

(a) There was a limited variety of educational software that dealt with Weight Control. Two programs were selected that met a portion of the behavioral objectives and one program was developed to meet the remaining objectives.

## (5) Existing Educational Software Evaluation.

(a) Evaluation of the existing educational software was conducted and documented on the Initial Staff Evaluation Forms attached at Inclosure 2-a and 2-b.

### (6) Criterion Measures.

(a) The criterion measures were written to determine the subject's entry level, (pre-test score), insure that the instruction taught the objectives (tasks the patient must master), and that the instructional system was effective (minimum of 80 percent competency level). See Inclosure 3.

## (7) Weight Control Instructional System.

(a) The following is a list of the forms necessary to administer the instructional strategy for Weight Control. These forms represent the paperwork actually encountered by each patient when s/he was given the learning system. Each form, including the learning tracks, falls in the proper order of sequence. See Inclosure 3, a-n.

a) Privacy Act Statement

b) Demographic Data: Weight Control

c) Weight Control Information - Part I (Pre-test)

d) Weight Control Objectives - Part I

e) Educational Intervention: Introduction to Anatomy and

Physiology of the Digestive Tract and the Importance of Good Eating Habits

f) Educational Intervention: Introduction and Concepts
About Obesity/Caloric Expenditure and Introduction to Physical Activity

g) Weight Control Information - Part I (Post-test)

h) Weight Control Information - Part II (Pre-test)

i) Weight Control Objectives - Part II

j) Educational Intervention: Concepts Pertaining to the

Importance of Physical Exercise/How to Use the Food Exchange List

k) Weight Control Information - Part II (Post-test)

1) Food Exchange Lists

m) Amphetamines (Handout)

#### (8) Formative Evaluation.

- (a) During the formative evaluation stage of Weight Control, the system was tested on a combination of subjects from the nursing staff, non-professional MEDDAC personnel, and patients from the Family Practice Clinic. The Project Director and/or the Instructional Designer was present for each instructional session to evaluate the subject's reaction to the learning system. If the subject encountered learning problems during the presentation of the learning strategy, the difficulties were noted on the Formative Evaluation: Patient Version Form (See Inclosure 4) so that the necessary revisions could be made.
- (b) At the conclusion of the learning session, each subject was interviewed to obtain comments concerning his/her personal feelings about the program. Information is provided as follows:
  - What were the most difficult parts of the lesson?
    "The Exchange List."
  - What was the best feature of the instruction? "Different types of physical activity for different ages." "Learning how to use the Food Exchange List."
  - What was the worst feature of the lesson?
    "Too much paperwork." "Too long."

(9) Data Collection.

The following is a compilation of demographic, test (prepost), and process evaluation data.

#### (a) Demographic Data.

A total of 30 individuals were used as subjects during the formative evaluation stage of Weight Control. These subjects were ccmprised of a cross section of nursing staff, non-professional MEDDAC personnel, and patients from the Family Practice Clinic.

- 2 <u>Source Breakdown</u>: There were 18 subjects from the Family Practice Clinic, six nursing service personnel, and six non-professional MEDDAC personnel used as subjects.
- 3 Sex Breakdown: This evaluation was comprised of the following: 21 female subjects and 9 male subjects.
- 4 Age Breakdown: Thirteen subjects were in the 15-25 year age group, ten from 25-35 years of age, and seven from 36-45 years of age.
- <u>5 Occupation Breakdown</u>: The occupation data is as follows: Thirteen housewives, seven students, six MEDDAC professional personnel, and four administrative personnel.
- <u>Marital Status</u>: The marital status information is provided as follows: Twenty-one married subjects, seven single subjects, one divorced subject, and one engaged subject.
- 7 Educational Level Data: Sixteen subjects had a high school education, eight subjects had attended 1-3 years of college, five subjects had obtained a Baccalaureate Degree, and one subject had obtained a Master's Degree.
  - (b) Pre and Post-test Data Collection.
- $\underline{1}$  There were 33 possible correct responses to the first session of Weight Control, and 10 possible correct responses to the second session of Weight Control. The results are as follows:

#### a Session I.

- (1) Pre-test Score Range: Of the 30 participants, the highest number of correct responses was 27 and the lowest number of correct responses was 12.
- (2) Post-test Score Range: Thirty-three was the highest number of correct responses and 25 was the lowest number of correct responses.
- (3) Total Scores -- Pre-test: 594 correct responses out of 990 possible points = 60 percent, the average percentage correct.
- (4) Total Scores -- Post-test: 829 correct responses out of 990 possible points = 84 percent, the average percentage correct.

# b Session II.

(1) Pre-test Score Range: Of the 30 participants, the highest number of correct responses was 6 and the lowest number of correct responses was one.

(2) Post-test Score Range: Ten was the highest number of correct responses and 5 was the lowest number of correct responses.

(3) Total Scores -- Pre-test: 92 correct responses out of 300 possible points = 30 percent, the average percentage

(4) Total Scores -- Post-test: 235 correct responses out of 300 possible points = 78 percent, the average percentage

(The average percentage scores were derived by dividing the total number of correct responses of the 30 subjects by the total possible points.)

#### (c) Correct Response Analysis.

1 The pre and post-tests were evaluated to determine areas to be strengthened or revised. Each subject's test responses were listed according to the corresponding behavioral objective and criterion measure. See Tables 1-4, pages 168-171, for the Correct Response Analysis -- Pre-test and Post-test.

#### (d) Process Evaluation.

1 The process evaluation measured the opinions toward the instructional strategy. The results are as follows: As a result of this learning experience, 18 subjects thought they had misconceptions about weight control. Twelve subjects felt they had no misconceptions. Seventeen subjects thought the learning experience clarified these misconceptions. One subject indicated that the misconceptions were not clarified by the learning experience. See Table 5, page 172, for the Tabulation of Process Evaluation Responses.

2 Seven subject areas were listed in the Comment Section of the Process Evaluation Form for Weight Control. A synopsis of the comments obtained in this section are provided as follows:

- a Physical Setting:
- b Health Educator:c Audio-Visual Equipment:
  - d Patient Education Programs:
  - Paperwork:
  - Patient Learning Concept:
  - Other:

All categories received one word statements such as: "Excellent," "Great," or "Very Good."

#### (10) Revisions.

(a) The third and fourth version results are shown on the Total Pre and Post-test Score (Session I, Table 6, p. 173, and Session II, Table 7, p. 174) tables. The revisions brought the fourth version scores up to the 80 percent competency level for 100 percent of the test population (Session I) and 87 percent of the test population (Session II).

#### 1 Rationale for the Revision.

a During the first version trial of the learning system, three workbooks were used as learning tracks in the first and second sessions. The workbooks proved to slow down the sessions and were ineffective. These workbooks were revised and tested during the second version trial. The second version instruction was more complete, but the subjects required extra time to complete them. It was decided to convert the workbooks to video-tape in a stimulus/response format. The third version proved to be effective but the pacing of the instruction was too fast for proper comprehension. The video-tape was re-recorded and the fourth version proved to be effective.

#### (11) Physician Evaluation.

(a) Upon completion of the revisions in the learning strategy, the Content Consultant (physician) reviewed the entire program and evaluated the content for the target population. See Inclosure 5, Physician Evaluation Form.

#### (12) Cost Analysis.

(a) The following (See Table 8, page 175) is an analysis of the costs inherent in developing a learning system for Weight Control. The costs are listed in three separate categories: 1) hardware (equipment), 2) software (educational materials), and 3) administrative (salaries, reproduction costs, etc.). For further cost information, see Appendix 9, pages 468-47Q Current Baseline Information and Cost Analysis.

#### (13) Final Staff Evaluation.

(a) Upon completion of the formative stage of the evaluation, the learning system was evaluated as a total package. See Inclosure 6, Final Staff Evaluation Form.

fer The Chil reaction of the Chil related version cannits are about on the Total fire and Service of the Chil fire and Service of the Chil fire total for 133 percent version access to the Chil partner of the Chil partner of the Chil popular

WEIGHT CONTROL INFORMATION - SESSION I CORRECT RESPONSE ANALYSIS - PRE-TEST

BEHAVIORAL OBJECTIVES	MEASURES		RESPONSE ANALYSIS	S		NUMBER OF INCORRECT
	(Incl 3-c)	1st Version	2nd Version	3rd Version	4th Version	RESPONSES*
1	1	+ - + + + - + + -	-+++++++	AND RESIDENCE AND ADDRESS OF THE PARTY OF	+ - + + + -	8
and the same	2	+++-++-+	++++++	++++-	+++++	4
	3	++++-++-	++++	+++-++	+-++-+	9
2	4	++-+++++	++++	++++	-+-+-	CD
	5	+++++++	-+++++++	+ - + + + +	+-+++	3
3	6	+++-++	+++-+++	+++	+++-++	7
		+++++++	++++++++	+++++	+++++	0
		-+++++	+-++++	+++	+-++	CD
		+++++-	+++-++++	++-++	++++-	6
4	7	++++++++	+++++++	+ - + + + +	+++++	2
	8	++++++++	++++++++	++++-+	+++++	1
	9	++++++-	++++++	++-++	++++-+	8
5	10	-++++++	++++++++	-++++	+++++	3
6	11	+++++++	++++	++++-	++-+	9
		++-+	+-+++	++++	++-+-	OD .
		-++++++	+++++	+ - + + + -	++-+-+	CD
		+++-+++-	-++++++	++-++	+++	6
7	12	++++-+	++++++++	-++++	++++-	5
	13	+-++++	++++++	++++	+++++	8
	14	++++++++	-++++-++	+ - + + + +	+++-++	4
8	15	-+++	+++-++-+	+-++	+ + +	CD
	16	+++++++	+-+++++	++-++	+++++	2
	17	++++++++	+++++++	+++++	-++++	2
	18	++-++++	+-++++-	-+++-+	+++	8
	19	++++-+-	+++-++	++++-+	+++++	6
	20	-+++	-+++++++	++++	+++-++	(00)
9	21	++-++++	+++++++	+++++	++++-	3
		+-+++	+++++	+++-++	+ - + + +	7
	22	+++-+++	+++++	-+++-	+++-+	8
	. winytee	+++++++	+++++++	+++++	+++++	0
		++-+++++	++-+-+++	++	+ - + + -	9
	23	++++++	+++++	-+++	-++-+-	a)
		+-++++	-++++-+-+	+ + + +	+ - + + - +	(10)

- - INCORRECT RESPONSE
  - + CORRECT RESPONSE
  - O CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

<sup>\*</sup>RESULTS TABULATED ON THE PRE-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

TABLE 2

WEIGHT CONTROL INFORMATION - SESSION I CORRECT RESPONSE ANALYSIS - POST-TEST

BLUAVIORAL OLDECTIVES	CRITERION MEASURES	RESPONSE ANALYSIS	NUMBER OF INCORRECT
	(Inc13-g)	1st Version 2nd Version 3rd Version 4th Version	RESPONSES*
1	1	++++++++++	3
		+++++++++++++++++++++++++++++++++++++++	0
2	2	++++++++++++++++++++++++++++++++++	2
,		+++-+++++++++++++++++++++++++++++++++++	4
		+++++++++++++++++++++++++++++++++++	0
3	3	+++++++++++++++++++++++++++++++++++++++	2
		+++++++++++++++++++++++++++++++++++++++	0
	4	+++-+++++++++++++++++++++++++++++++++++	4
	5	+++++++++++++++++++++++++++++++++++++++	0
4	6	+++++++++++++++++++++++++++++++++++++++	0
5	7	+++++++++++++++++++++++++++++++++++++++	0
	8	+++++++++++++++++++++++++++++++++++++++	2
	9	+++++++++++++++++++++++++++++++++++++++	0
6	10	++++++-++++++++++++++++++++++++++++++++	3
	11	+-+++++++++++++++++++++++++++	6
	12	+++++++++++++++++++++++++++++++++++++++	5
	13	++++-++++++++++++++++++++++++++++++++++	2
		+++++++++++++++++++++++++++++++++++++++	1
7	13	+++++++++++++++++++++++++++++++++++++++	4
		+++++++++++++++++++++++++++++++++++++++	0
	14	-++++++++++++++++++++++++++++++++++++	6
	15	+++++++++++++++++++++++++++++++++++++++	0
	16	+++++++++++++++++++++++++++++++++++++++	0
	17	+++++++++++++++++++++++++++++++++++++++	3
8	18	+++++-+++++++++++++++++++++++++++++++++	4
		+++++++++++++++++++++++++++++++++++++++	1
		+++++++++++++++++++++++++++++++++++++++	0
		+++++++++++++++++++++++++++++++++++++++	2
	19	+++++++++++++++++++++++++++++++++++++++	3
	20	+++++++++++++++++++++++++++++++++++++++	0
9	21	+++++++++++++++++++++++++++++++++++++++	0
	22	+++-++++++++++++++++++++++++++++	4
	23	-+++++++++	3

- = INCORRECT RESPONSE
- + = CORRECT RESPONSE
- CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

\*RESULTS TABULATED ON THE POST-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED. NO REVISIONS WERE NECESSARY IN THE FINAL SYSTEM.

WEIGHT CONTROL INFORMATION - SESSION II CORRECT RESPONSE ANALYSIS - PRE-TEST

	INCORRECT	RESPONSES*	8	7	6	9	5	9	GB.	7	6	8
	KESPUNSE ANALISIS	(3-h) 1st Version   2nd Version   3rd Version   4th Version	+ + + +	++++-++++-++-+-+++++++++++++++++	++++-+-++++++++	+-++++-+-+-+-+-+	++-+++++++++++++++++++++	+++-++++-+++++++++++++++++++++++	+++++++-+-+-+-+-+-+-+	+++++++-+++++++++++++++++++	<del>+-+++++-+</del>	+++++++++++++
MITTER	MEASURES	(Incl 3-h)	1	2	3	7	2	9	7	80	6	10
RPHAUTORAT	OBJECTIVES		1		2		3		4		2	

- = INCORRECT RESPONSE

+ = CORRECT RESPONSE

O = CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT
IN THE INSTRUCTIONAL STRATEGY

\*RESULTS TABULATED ON THE PRE-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

WEIGHT CONTROL INFORMATION - SESSION II CORRECT RESPONSE ANALYSIS - POST-TEST

BJECTIVES	CRITERION								RES	PO	NSE	A	IAL	RESPONSE ANALYSIS	S		N .				0	3 11	NUMBER OF INCORRECT	OF
	(Incl 3-4)		181	N A	1st Version	ton			2	pu,	Ve	rsi	2nd Version	7	3rd	V	ers	ton	4t	h	Jer.	3rd Version 4th Version	RESPONSES*	SES*
1	1	土	+	+	+	+	+	+	+	+	+	1	+	+	++	+	+	+ -	+	+	+ +	++++++++++++++++++++++++++	3	
	2	+++++++++++++++++++++++	+	+	+	++	+	1	+	+	+	+	+	+	+	+	+	++	+	+	+	++	2	
2	3	+	+	1	+	++	+	+	+	+	+	+	1	+	++	+	+	++	+	+	1	++-+++++++++++++++++++	7	
	4	++++++++++++++++++++++	+	+	+	+	+	+	+	+	+	+	+	+	++	+	+	+	+	+	+ +	++	2	
3	5	+++++++++++++++++++++++++	+	+	+	++	+	+	+	+	+	+	+	+	+	+	+	++	+	+	+ +	++	0	
	9	++	+	++	+	++	+	+	+	+	+	+	+	+	+	+	+	++	+	+	+	+++++++++++++++++++++++	0	
4	7	++	+	+	+	1+	+	+	+	+	+	+	+	+	++	+	+	++	1	+	+ +	++++++++++++++++++++++++	3	
	80	++	+	+	+	++	+	+	+	+	+	+	+	+	++	+	+	++	+	+	+ +	++++++++++++++++++++++++	0	
2	6	+	+	++	+	++	+	+	T	+	+	+	+	+	+	1	+	++	+	+	1 4	++-++++++++++++++++++	7	
	10	++++++++++++++++++++++++	+	1	+	+	+	+	+	+	+	1	+	+	+	+	+	++	+	+	+	++	C	

- = INCORRECT RESPONSE

+ = CORRECT RESPONSE

O = CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY \*RESULTS TABULATED ON THE POST-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED. NO REVISIONS WERE NECESSARY IN THE FINAL SYSTEM.

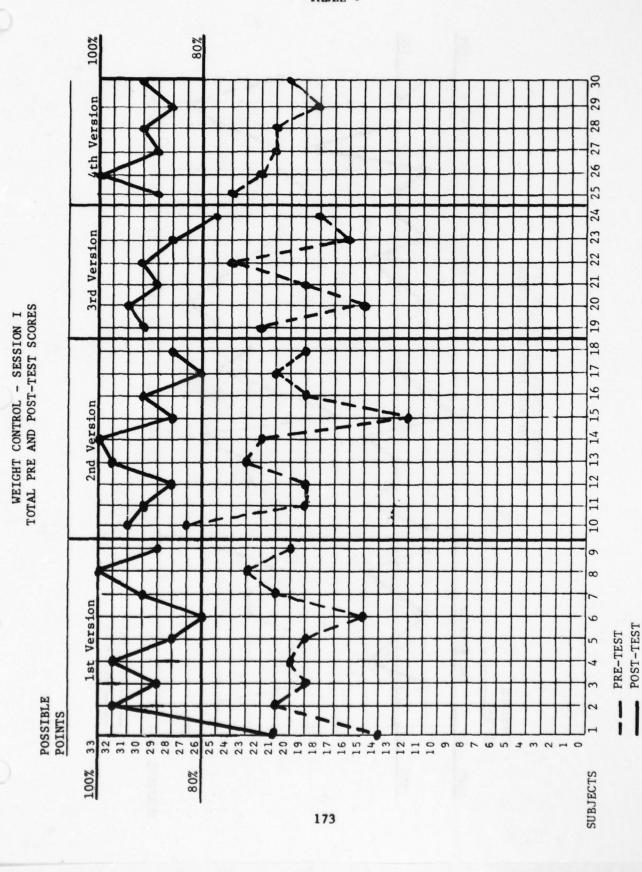
TABLE 5

# TALLITATION OF PROCESS EVALUATION RESPONSES WEIGHT CONTROL

ltem		LINE BY	Opinion		
	<u>o</u>	0	21	64	3
Viewing Time	Too Short	2	OK	4	5 Too Long
	100 Shore		OK		100 Long
	0	$\frac{2}{2}$	$\frac{18}{3}$	74	3
Content Interest	Boring	- 2	OK OK	4	Fascinating
Questions on Topic	0	0 2	$\frac{24}{3}$	24	4 5
vaese tons on Topic	No Help		OK		eally Helped
	1	$\frac{2}{2}$	23	44	<u>o</u>
Pace	Too Slow		OK	4	Too Fast
			0		100 1450
Contant Hadamana	0	$\frac{7}{2}$	$\frac{21}{3}$	24	7 -
Content Uniqueness	Old Stuff		OK	4	All New
	0	0	23	7	0
Content Value	ī	$\frac{0}{2}$	23	4	5
	No Value		OK	M	ost Valuable
Learning Lab	<u>o</u>	0 2	13	14	3
Technicians' Style	Poor	2	OK	4	5 Excellent
	1001		UK		Prestrent
	0	0 2	$\frac{1}{3}$	21	8
Learning Center	Poor	2	OK	4	Excellent
0	-				
Preference for Instruction	18	6	4 3	1/4	1/5
111011111111111111111111111111111111111	A/V Mode	-	Neutral	L	ive Teacher
Freedom to learn by	<u>o</u>	2	12	10	6
A/V compared to usual instructions	Less Freedom	2	3	4	ore Freedom
instructions	ress treedom		Equal	ra.	ore rreedom
Personal responsibi-					
lities for learning . by A/V compared to	0	0	6	18	6
usual instruction by	$\frac{0}{1}$	$\frac{0}{2}$	$\frac{6}{3}$	4	5
health workers	Less		Equa 1	er un e	More
Patient attitude	0	1	6	20	3
toward A/V modes for	Ī	1/2	3	4	5
health education	Poor		Neutral		Excellent
Patient viewing of	6	$\frac{8}{2}$	7	6	3
commercial TV in hours during the day	Less Than	2	Hours	4	ore Than

Tabulations Rating Scale

TABLE 6



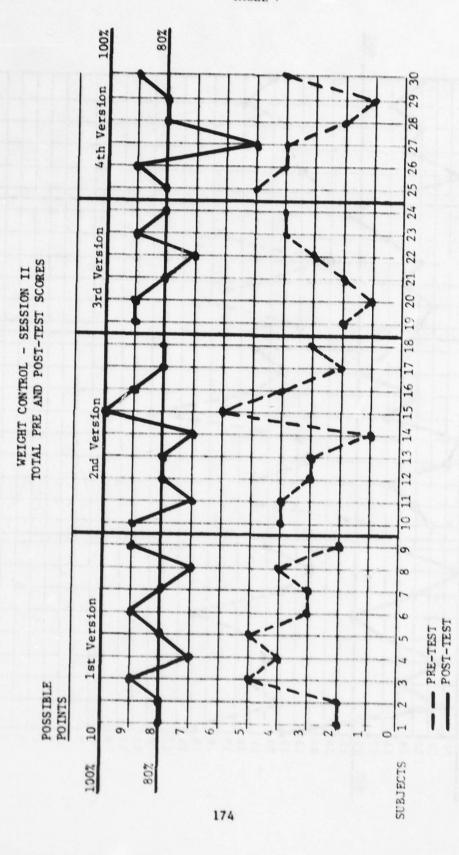


TABLE 8

	WELGHI CONTROL COST ANALYSIS	MALYSIS		
			RECURRI	RECURRENT COSTS
HARDWARE	DEVELOPMENTAL AND INVESTMENT COSTS (Price per Unit)	COST PER HOUR	COST X 2 Hrs	TOTAL COST OF COMPLETE STRATEGY (2 Units of Instruction) 2 Hrs
SONY: Video Tape Recorder TV Monitor	Price per unit no longer need- ed to be added. Initial invest- ment coet use annotated under	\$0.147	\$0.29	
Headphones	hypertension.	.002	.004	
Listening Center		.002	700.	8 1
Maintenance	For each piece of equipment = 1¢/Unit Hr	70.	80.	813
SUB-TOTAL	¢	\$0.26	\$0.54	\$0.54
SOFTWARE				
PACOMED Script	0	\$0.032		e a
TIME LIFE VIDEO: Good Sense About Your Stomach	\$150.00	.025		3980 4986 498
PACOMED VTR: Obesity	50.00	800-		30
MEDFACT/PACOMED: Overweight	95.00	.016		Carr
SUB-TOTAL	\$295.00	\$0.08		\$0.08
PACOMED: Physical Activity Food Exchange List	\$70.00	\$0.012 .011	,	1421
SUB-TOTAL	\$136.50	\$0.02		\$0.02
TOTAL				\$0.64
ADMINISTRATIVE COSTS				
Developmental	\$454.00			
Typing & Reproduction	132.00			
Paperwork to Individualize Strategy		\$0.09		
SUB-TOTAL	\$586.00	\$0.09		\$0.09
TOTAL	\$1017.50			\$0.73

#### INCLOSURE 1

Weight Control Objectives - Parts I & II

a-b

#### WEIGHT CONTROL OBJECTIVES - PART I

Upon completion of this program the patient will be able to:

- 1. Explain how to treat their digestive system.
- 2. Define overweight/obesity.
- List four main causes of overweight/obesity. For example: overeating, social pressures, lack of exercise, lack of will power.
- 4. List five diseases directly related to obesity. For example: Hypertension, diabetes mellitus, heart disease, postsurgical complications, hypoventilation, strain on the back and joints, toxemia, etc.
- 5. Explain what the overweight/obese patient's attitude toward weight control should be.
- 6. List the main reasons to avoid "fad/crash" diets.
- 7. Explain the importance of self-motivation.
- 8. List what his/her ideal weight should be.
- List the advantages the patient will have after gaining control of his/her weight.

#### WEIGHT CONTROL OBJECTIVES - PART II

Upon completion of this program the patient will be able to:

 Explain the role of exercise in relation to weight reduction and control. For example:

.The benefit of balancing activity with caloric intake;

The benefit of various types of exercise and how they relate to life style.

- 2. Explain the types of food, i.e., protein, fat, fruits, etc.
- 3. Explain food exchange lists,
- 4. Explain the importance of eating the exact amounts and types of food recommended for daily consumption.
- 5. Effectively plan menus using the exchange lists:
  - a) Milk exchanges
  - b) Vegetable exchanges
  - c) Fruit exchanges
  - d) Bread exchanges
  - a) Meat exchanges
  - f) Fat exchanges
  - g) Foods allowed as desired
  - h) Foods not on the exchange lists

### INCLOSURE 2

Initial Staff Evaluation Forms

TITS AND ROTHER BOOK OF THE PROPERTY OF THE ATLANTAN

#### INITIAL STAFF EVALUATION FORM

SUBJECT Weight Control	TITLE Good Sense About Your Stomach
WORKING TIME 10 Minutes	DATE PRODUCED 1974
FORMAT Video-tape	DATE EVALUATED June 1975
PRODUCER Time/Life Video New York, NY	PURCHASE/RENTAL SOURCE Same
PRICE \$150.00  AVAILABILITY: CONTRACT PRODUCER OR COOR SYNOPSIS Dramatically demonstrates peo- indigestion.	DINATOR DIRECTLY. ples' misconceptions about overeating and
INTENDED AUDIENCE Adult/High School Ag OBJECTIVES Meets basic behavioral objectives	
PHOTOGRAPHY: POOR FAIR GOOD	K EXCELLENT EXCELLENT deo-tape needs behavioral objectives. Pre- &
COULD THIS FORMAT WORK EFFECTIVELY BY IT:	SELF? Yes
EXPLAIN: With proper forms mentioned ab	oove.
COULD THIS SUBJECT/FORMAT (PACKAGE) BEST YES X	BE USED AS A SUPPLEMENT TO OTHER INSTRUCTION?
EXPLAIN: As an introduction to a learni	ng system on Weight Control.
POSITION: INSTRUCTIONAL DESIGNER	

AHS FORM 15 (PACOMED) 25 Mar 1975

#### INITIAL STAFF EVALUATION FORM

SUBJECT Weight Control	TITLE Weight Control
WORKING TIME 7 Minutes	DATE PRODUCED 1974
FORMAT Filmstrip	DATE EVALUATED April 1975
PRODUCER MedFact, Inc.	PURCHASE/RENTAL SOURCE Same
Massilon, OH	rrt control of the
PRICE \$65.00	
AVAILABILITY: CONTRACT PRODUCER OR COORDIN	NATOR DIRECTLY.
SYNOPSIS Introduces how people gain weigh	it as they grow older and do not maintain
a proper food intake/activity output le	vel. Points out how weight is lost
gradually and should be controlled.	
INTENDED AUDIENCE Adult/High School Age	
OBJECTIVES Meets basic behavioral objective	e requirements.
TECHNICAL ASPECTS:	
SOUND: POOR FAIR GOOD X	EXCELLENT
PHOTOGRAPHY: POOR FAIR GOOD X	
SPECIAL STRENGTHS AND/OR WEAKNESSES To wo	ork effectively the filmstrip will need
Pre- & Post-tests and behavioral	objectives.
The second contraction of the second contrac	
COULD THIS FORMAT WORK EFFECTIVELY BY ITSEL	
	k on dieting and physical activity,
with the mentioned supplementary	forms.
	E USED AS A SUPPLEMENT TO OTHER INSTRUCTION?
YES X	NO
EXPLAIN: Should be used as the second tra	ck in the total system, i.e., Good Sense
About Your Stomach, then Weight	Control.
POSITION: INSTRUCTIONAL DESIGNER	

AHS FORM 15 (PACOMED) 25 Mar 1975

INCLOSURE 3 Weight Control Instructional Systems Forms

AVAILAGITATES CONTRACT PRODUCER OR MUTUBIALISE DIRECTLY.

### PRIVACY ACT STATEMENT (5USC 552a)

1. Authority for collection of information including Social Security Number:

Section 3012, Title 10, US Code.

2. Principal purposes for which information is intended to be used:

To assist medical research personnel in the monitoring of individual patient performance and in the evaluation of the PACONED concept. The last four digits of the SSN identifies the patient and allows for computer consolidation, comparison, and retrieval of individual data, and cross reference with the outpatient record if required.

#### 3. Routine uses:

This information may be used in research pertaining to the planning and development of a prototype patient and community health staff education module; in the establishment of an objective and behavioral data bank; and in the development of appropriate medical instructional systems. Individual data may be used in analysis and discussion with other AMEDD personnel and consolidated in research reports for general release. No information that identifies any individual patient or physician will be released.

- 4. Providing of this information is voluntary but failure to provide will result in your exclusion from the research project.
- 5. The following forms are currently in use with this statement:

AHS Form 180 Demographic Data: Weight Control
Pre Test Weight Control Information - Part I
Pre Test Weight Control Information - Part II
Post Test Weight Control Information - Part I
Post Test Weight Control Information - Part II
AHS Form 181 Demographic, Baseline Data, & Test Sco

AHS Form 181 Demographic, Baseline Data, & Test Scores: Weight Control

AHS Form 181a Process Evaluation: Weight Control

AHS Form 181b Three Month Follow-Up Data: Weight Control
AHS Form 181c Six Month Follow-Up Data: Weight Control

Questionnaire Questionnaire Type 0
Scale Nelson-Denny Scale
Scale Rotter's I.E. Scale

Demographic Data: Weight Control

INSTRUCTIONS: Please answer each item by supplying the correct information. If you have any questions, do not hesitate to ask the health educator.						
FUL	L NAME:	Silver all all benverer de	Hekar.		TREE OF	
ADD	RESS:	reet) (City)	Like to	(State)	(71p)	
TEL.	EPHONE NUMBERS			hus , manh	The state of the	
			WOLK			
1.		gits of sponsor's SSN			ne alel	
2.	Date:	take agracia				
3.	Patient's Sta	tus (Circle one of the foll	owing)			
		Service Member	Depe	ndent		
٠.	Sponsor's Ran	de / Status				
	•	nk/Status/		_		
	Sex:					
	Sex:	The value of the settle				
	Sex:Age last birt	hday:				
	Sex: Age last birt Occupation:	hday:	nioles nioles nioles nieles	inii 20 go y ak aliiya tol 20 yo	Provident	
	Sex: Age last birt Occupation:	hday:s:	nte bus nte bus nte bus nte nte	in mercel into the go only of the s into the contract into the con	Provided  Provided  The old  And Form  Provided	
	Sex: Age last birt Occupation:	hday:s:	nte bus nte bus nte bus nte nte	in mercel into the go only of the s into the contract into the con	Provided (de will ed The Col	
	Sex: Age last birt Occupation: Marital statu	hday:s:	Divord	in mercel into the go only of the s into the contract into the con	Provided  (do will re  (do will re  (he will re  (he col  Pre lost  Pre lost  Pre lost  Pre lost	
	Sex:  Age last birt Occupation: Marital statu Married:	hday:s:Single: Engaged:	Divord	ced:	Provided  (do will re  (do will re  (he will re  (he col  Pre lost  Pre lost  Pre lost  Pre lost	
	Sex:  Age last birt Occupation: Marital statu Married: Widowed:	hday: s: Single: Engaged: Elementary School:	Divord	ced:	Provided  (do will re  (do will re  (he will re  (he col  Pre lost  Pre lost  Pre lost  Pre lost	
	Sex:  Age last birt Occupation: Marital statu Married: Widowed:	s: Single: Engaged: Pleted: Elementary School: (lst - 6th grade)	Divord	ced:	Provided  (do will re  (do will re  (he will re  (he col  Pre lost  Pre lost  Pre lost  Pre lost	
	Sex:  Age last birt Occupation: Marital statu Married: Widowed:	hday: s: Single: Engaged: Elementary School:	Divord	ced:	Provided  (do will re  (do will re  (he will re  (he col  Pre lost  Pre lost  Pre lost  Pre lost	
	Sex:  Age last birt Occupation: Marital statu Married: Widowed:	hday:  s:  Single:  Engaged:  pleted:  Elementary School: (lst - 6th grade)  Junior High School:	Divord	ced:	Provided  (do will re  (do will re  (he will re  (he col  Pre lost  Pre lost  Pre lost  Pre lost	
5.	Sex:  Age last birt Occupation: Marital statu Married: Widowed:	hday: s: Single: Engaged: pleted: Elementary School: (1st - 6th grade) Junior High School: (7th - 8th grade) High School:	Divord	ced:	Provided  (do will re  (do will re  (he will re  (he col  Pre lost  Pre lost  Pre lost  Pre lost	

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9.	Education completed: Cont'd	Mast	er's Degre	е
		Doct	or's Degre	e
10.	How long have you been overweig	ght/ol	bese?	
		Less	then 3 mo	s.
		4 to	6 mos.	1114 Ann
		7 to	12 mos.	Malejalo
			2 yrs.	
		More	then 2 yr	s
11 .	How many of your family members	are	overweigh	t/obese?
			Spouse:	Husband
				Wife
			Children: (i.e., <u>1</u>	of children
			Parents:	Maternal
				Paternal
				Both

Demographic Data: Weight Control

#### Weight Control Information - Part I Pre-test

INSTRUCTIONS:		There are two types of questions contained in the Weight Control Information Section (Multiple Choice and Fill-in):	,
		Multiple Choice: Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answers that statement. Mark an "X" on the line or lines in front of your answer(s).	
		Fill-in: Read each statement carefully. Fill in the blank with the answer that best completes each statement.	
1.	(inherited	ible causes of overweight/obesity are: 1) Genetic factors i), 2) Matabolic dysfunction, 3) Food intake, somatic factors, and 5) Physical inactivity.	
	Which of t	the above is the most common cause of overweight/obesity?	
2.	can be rap	cissue contains a certain amount of that oldly list through the use of fad/crash diets. This same is also rapidly regained.	
3.		controlled diet program, how many pounds should a patient ed to lose each month?	
	2 1b	s 4-5 lbs 8-10 lbs.	
	4 1b	os 4-7 lbs 12-15 lbs.	
4.	Food energ	gy is measured in	
5.	The end re	esult of caloric intake in excess of energy output is:	
	fati	gued heart.	
	over	weight/obesity.	
	high	blood pressure.	

Weight Control Information - Part I

6.	Which of the following may be irritants to your digestive system?
	Aspirin Antacids Milk
	Coffee Orange Juice Eggs
7.	When you don't treat your digestive system properly, gas backs up into the esophogus and causes a pain called:
8.	Your stomach starts to prepare to receive food even before the food is eaten. How long does it take the food, once it is eaten, to reach the stomach?
	5 seconds 8 seconds 10 seconds 20 seconds
	Excess fat is the result of an imbalance between caloric intake and
	•
).	<b>Keeping</b> tabs on your progress is extremely important. Check yourself on the same scales:
	daily weekly bi-weekly.
1.	List four reasons for gaining control of your weight.
	2-6-3ms 25-10-3ms 25-10-3ms
	The state of the s
	v del l'angles Zaelf jury at lais. Es
	If overweight/obesity sets in before age 10 or after age 16, it will:
	not physically impair activity levels.
	probably not remain into adulthood.
	probably remain into adulthood.
	How many calories are there in a single pound of stored fat?
	1,200 calories 3,700 calories
	2,000 calories 4,800 calories

ACADEMY OF HEALTH SCIENCES (ARMY) FORT SAM HOUSTON TX--ETC F/G 6/5
STRATEGY FOR INSTRUCTIONAL SYSTEMS DESIGN AND FORMATIVE EVALUAT--ETC(U)
JUL 76 D H KUCHA
HCSD-79-001-B
NL AD-A070 921 UNCLASSIFIED 3 OF 7 AD A070921

5.	What percentage of your body is water?
	30% 45% 60% 70%
	What kind of weight loss is more apt to be permanent and would not necessitate a punishing diet.
	Rapid Gradual Deliberate
7.	The most important word(s) in obesity treatment and weight control are:
	Self-control Self-denial Stop eating
8.	Obesity is defined as being:
	15-20% above ideal body weight.
	20-25% above ideal body weight.
	25-30% above ideal body weight.
	30-35% above ideal body weight.
	It is important to maintain a certain amount of fluid in your daily diet. How much fluid should be taken into your body daily, unless
١.	It is important to maintain a certain amount of fluid in your daily diet. How much fluid should be taken into your body daily, unless restricted by your physician?
9.	It is important to maintain a certain amount of fluid in your daily diet. How much fluid should be taken into your body daily, unless restricted by your physician?  2-6 cups 5-10 cups 7-13 cups
0.	It is important to maintain a certain amount of fluid in your daily diet. How much fluid should be taken into your body daily, unless restricted by your physician?  2-6 cups 5-10 cups 7-13 cups  4-8 cups 6-12 cups 8-15 cups
0.	It is important to maintain a certain amount of fluid in your daily diet. How much fluid should be taken into your body daily, unless restricted by your physician?
). !.	It is important to maintain a certain amount of fluid in your daily diet. How much fluid should be taken into your body daily, unless restricted by your physician?
	It is important to maintain a certain amount of fluid in your daily diet. How much fluid should be taken into your body daily, unless restricted by your physician?
0.	It is important to maintain a certain amount of fluid in your daily diet. How much fluid should be taken into your body daily, unless restricted by your physician?
2.	It is important to maintain a certain amount of fluid in your daily diet. How much fluid should be taken into your body daily, unless restricted by your physician?

Weight Control Information - Part I

#### WEIGHT CONTROL OBJECTIVES - PART I

Upon completion of this program the patient will be able to:

- . Explain how to treat their digestive system.
- . Define overweight/obesity.
- List four main causes of overweight/obesity. For example: overeating, social pressures, lack of exercise, lack of will power.
- List five diseases directly related to obesity. For example: Hypertension, diabetes mellitus, heart disease, postsurgical complications, hypoventilation, strain on the back and joints, toxemia, etc.
- . Explain what the overweight/obese patient's attitude toward weight control should be.
- . List the main reasons to avoid "fad/crash" diets.
- . Explain the importance of self-motivation.
- . List what his/her ideal weight should be.
- . List the advantages the patient will have after gaining control of his/her weight.

EDUCATIONAL INTERVENTION: INTRODUCTION TO ANATOMY AND PHYSIOLOGY OF THE DIGESTIVE TRACT AND THE IMPORTANCE OF GOOD EATING HABITS

EDUCATIONAL INTERVENTION: INTRODUCTION AND CONCEPTS ABOUT OBESITY/CALORIC EXPENDITURE AND INTRODUCTION TO PHYSICAL ACTIVITY

#### Weight Control Information - Part I Post-test

		There are two types of questions contained in the Weight Control Information Section (Multiple Choice and Fill-in):	,
		Multiple Choice: Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answers that statement. Mark an "X" on the line or lines in front of your answer(s).	
D.T.	MANUST SERVE	Fill-in: Read each statement carefully. Fill in the blank with the answer that best completes each statement.	
1.	One pound	of fat generates enough energy to walk:	
	7 mi	les 23 miles 52 miles	5
	14 m	files 46 miles 75 miles	0
2.		of physical activity program should be maintained during luction and the rest of your life?	
	Stre	nuous Constant Terminal (Stop when you reach a certain level)	
3.	The averag	e individual can only increase the physical activity by entage?	
	10-1	5%15-18%18-20%20-30%	
4.	What is yo	our ideal weight?	
5.	diet. How	rtant to maintain a certain amount of fluid in your daily much fluid should be taken into your body daily, unless by your physician?	
	2-6	cups 5-10 cups 7-13 cups	
	4-8	cups 6-12 cups 8-15 cups	7

Weight Control Information - Part I

6.	Obesity is defined as being:
	15-20% above ideal body weight.
	20-25% above ideal body weight.
	25-30% above ideal body weight.
	30-35% above ideal body weight.
7.	16. Your stopped resures of propert to request food avec before the so
′.	The most important word(s) in obesity treatment and weight control are:
	Self-control Self-denial Stop eating
8.	What kind of weight loss is more apt to be permanent and would not necessitate a punishing diet.
	Rapid Gradual Deliberate
9.	What percentage of your body is water?
	30% 45% 60% 70%
10.	What is your recommended daily caloric intake?
11.	How many calories are there in a single pound of stored fat?
	1,200 calories 3,700 calories
	2,000 calories 4,800 calories
12.	If overweight/obesity sets in before age 10 or after age 16, it will:
	not physically impair activity levels.
	probably not remain into adulthood.
	probably remain into adulthood.
13.	List four reasons for gaining control of your weight.
	22. The body treems cuttains a cariffic arount of the code to the
	the card of the real of the control of the card of the
	. Destingar of Exper exis of mentadom usas
	23. Five possible causes of overweighty clearity ago: (1) Countic facto (incorrided), 2) Metabolic Counties (account to the counties)

Weight Control Information - Part I

daily	weekly.	bi-weekly.	
Excess fat is the and	result of an imbal	ance between calor	ic intake
	•		
Your stomach start is eaten. How lon reach the stomach?	g does it take the		
5 seconds	8 seconds	10 seconds	20 seconds
When you don't tre- into the esophogus			as backs up
Which of the follow	wing may be irrita	nis to your digest	ive system?
Aspirin	Antacids	Milk	
Coffee	Orange juice	Eggs	
The end result of	caloric intake in	excess of energy o	utput is:
fatigued hear	rt. selse bet c		
overweight/ol	besity.		
high blood p	ressure.		
Food energy is meas	sured in	obsess offering	
In a well controlle be expected to lose		ow many pounds sho	
2 lbs	4-5 lbs.	8-10 lbs.	
4 1bs.	4-7 lbs.	12-15 lbs.	
The body tissue con	ntains a certain a	mount of	
that can be rapidly same substance is a			diets. This
Five possible cause (inherited), 2) Me	etabolic dysfunction	on, 3) Food intake	
4) Psychosomatic fa			
Which of the above	is the most common	n cause of overweig	ght/obesity?

### Weight Control Information - Part II

	Tue fame a		Pre-	test	terry to bear the s	en Boy 3.1
INSTRUCTIONS:		may have me	ore than or choices bes	e correct answers	The statements answer. Decide that question. front of your a	which Mark
EX	KAMPLE:	Boston is	the capital	of:		
		Con	necticut			
		Com	necticut			
		X Mas	sachusetts			
		Ver	mont		e A June Di Tevro e b b Lucia successi	
1.	Each porti	on of food	on the Food	Exchange	List is called:	100
	a f	ood value				
		erving				
	a s	erving				
	an	exchange				
2.	The foods	listed on ea	ach exchang	ge list:		
	are	equal to ea	ach other o	n the same		
	tapered of	not ogual	to the other	r foods or	the same list.	
	and ma 48					
	are	equal in po	ortion size	s.		
3.	How many k	inds of mill	k are there	on the m	llk exchange lis	t?
	5	7	8	10		
4.	The purpos	e of the foo	od exchange	list is	co: als dans ero	
	hel	p you balan	ce your die	et.		
	hel	p you lose t	weight syst	ematically	7.	
	tel	1 how much	food you ca	n have at	each meal.	

Weight Control Information - Part II

5.	Ice cream is on the:
	Fat List Bread List Milk List
6.	If you are allowed 1 fruit exchange and decide to have an apple, what size should you have?
	SmallMediumLarge
7.	If you are allowed 2 fruit exchanges and want orange juice, how much should you have?
	1/2 cup1 cup
	3/4 cup 1 <sup>1</sup> / <sub>2</sub> cup
8.	If you are over 30 and beginning a physical fitness program, the first thing you should do is:
	start slowly
	get a physical exam
	get the right equipment
9.	A physical fitness program should be:
	strenuous.
	designed to meet your current needs.
	maintained until you meet your current goals, then tapered off.
0.	If you find a food that you would like to try but it is not on the Exchange List, you should check with your:
	doctor. againing after any no wileterers alike to about gone well . C.
	dietitian.
	grocery store clerk.

Meal Planning: Weight Control Information - Part II

INSTRUCTIONS:	The following planning sheet is for one meal only.  First fill in the number of exchanges you are allowed for one meal, each of the exchanges. Second, list the types of food you would select in each category
19/5/19	and third, fill in the proper amount (portions) each number of exchanges would allow you of that type of food.

EXAMPLE:	EXCHANGES	NUMBER ALLOWED	TYPE OF FOOD	PORTIONS
	Milk	1	Skimmed Milk	1 Cup

EXCHANGES	NUMBER ALLOWED	TYPE OF FOOD	PORTIONS
MILK	acks sensit	ca an'i garao ateray bala	vlavinashti
		259.18	ona sita (a
VEGETABLE		. englishmen s	ldmangaV (d
		flanges	el lank fo
FRUIT		essnan:	ke bustil (b
		Beautil	ica mah (a
BREAD		0.00(87)	1) Fat exes
		Carlysh as bosto.	La stand (s
MEAT		egalikem minerieda da .	on about La
FAT			

#### WEIGHT CONTROL OBJECTIVES - PART II

Upon completion of this program the patient will be able to:

. Explain the role of exercise in relation to weight reduction and control. For example:

The benefit of balancing activity with caloric intake;

The benefit of various types of exercise and how they relate to life style.

- . Explain the types of food, i.e., protein, fat, fruits, etc.
- . Explain food exchange lists.
- Explain the importance of eating the exact amounts and types of food recommended for daily consumption.
- . Effectively plan menus using the exchange lists:
  - a) Milk exchanges
  - b) Vegetable exchanges
  - c) Fruit exchanges
  - d) Bread exchanges
  - e) Meat exchanges
  - f) Fat exchanges
  - g) Foods allowed as desired
  - h) Foods not on the exchange lists

EDUCATIONAL INTERVENTION: CONCEPTS PERTAINING TO THE IMPORTANCE OF PHYSICAL EXERCISE/HOW TO USE THE FOOD EXCHANGE LIST

#### Weight Control Information - Part II Post-test

INSTRUCT	TIONS: Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answers that question. Mark an "X" on the line or lines in front of your answer(s).
EXAMPI	E: Boston is the capital of:
	Connecticut
	X Massachusetts
	Vermont
	you find a food that you would like to try but is is not on the nange List, you should check with your:
	_ doctor.
	_ dietitian.
	_ grocery store clerk.
2. A ph	ysical fitness program should be:
	_ strenuous.
	_ designed to meet your current needs.
	_ maintained until you meet your current goals, then tapered off.
	ou are over 30 and beginning a physical fitness program, the st thing you should do is:
	_ start slowly.
	_ get a physical exam.
	get the right equipment.

### Weight Control Information - Part II

69	4.	If you are allowed 2 fruit exchanges and want orange juice, much should you have?	how
		1/2 cup 1 cup 1 sup 1	
		3/4 cup 1½ cup	
	5.	If you are allowed 1 fruit exchange and decide to have an apwhat size should you have?	
		small mediumlarge	
	6.		
		fat list bread list milk list	
	7.	The purpose of the food exchange list is to:  help you balance your diet.	
		help you lose weight systematically.	
		tell how much food you can have at each meal.	
	8.	How many kinds of milk are there on the milk exchange list?	
		5 7 8 10	
	9.	The foods listed on each exchange list:	
		are equal to each other on the same list.	
		are not equal to the other foods on the same list.	
		are equal in portion sizes.	
	10.	Each portion of food on the Food Exchange List is called:	
		a food value.	
		a serving.	
		an exchange.	

Meal Planning: Weight Control Information - Part II

The following planning sheet is for one meal only. First fill in the number of exchanges you are allowed
for one meal, each of the exchanges. Second, list the types of food you would select in each category and third, fill in the proper amount (portions) each number of exchanges would allow you of that type of food.

EXAMPLE:	EXCHANGES	NUMBER ALLOWED	TYPE OF FOOD	PORTIONS
	Milk	1	Skimmed Milk	1 Cup

EXCHANGES	NUMBER ALLOWED	TYPE OF FOOD	PORTIONS
MTLK	+	7	ABBI WEED
VEGETABLE		L studies and a 1	a latte absent
FRUIT			
BREAD	inthis at tall sum in	sa book and no book	To notized a
MEAT			elvres e
FAT			

### LIST MILK EXCHANGES 機器

ne exchange contains: carbohydrate 12 gm., protein d gm., fat 10 gm.

												Use
	e milk										1	cup
*Skim	milk		 		 					 	1	cup
Evap	orated milk.		 							 1/	2	cup
Powe	dered whole	milk	 							 1/	4	cup
*Powe	dered skim n	nilk	 			,				 1/	4	cup
Butte	ermilk ade from wh											
	ermilk ade from ski										1	cup

\*Skim milk products are fat free. When you use a skim milk product instead of a whole milk product, add 2 fat exchanges to your meal to get the correct food value.

### LIST VEGETABLE EXCHANGES

A Vegetables: In raw form, size of serving is unlimited. If cooked, size of serving should not exceed 1 cup. Conains negligible carbohydrate, protein and fat.

Asparagus	Romaine
*Broccoli	Sauerkraut
Brussels sprouts	String beans, young
Cabbage	Summer squash
Cauliflower	*Tomatoes
Celery	(1 per serving)
*Chicory	*Watercress
Cucumber	*Greens
Eggplant	Beet greens
*Escarole	Chard
Lettuce	Collards
Mushrooms	Dandelion
Okra	Kale
*Parsley	Mustard
*Pepper, green	Poke
Radish	Spinach
Rhubarb	Turnip greens

B Vegetables: One exchange equals 1/2 cup. Contains carbohydrate 7 gm., protein 2 gm., fat negligible.

Beets	Pumpkin
*Carrots	Rutabagas
Onions	*Squash, winter
Peas, green	Turnip

\*Contains considerable amount of vitamin A.

### LIST S FRUIT EXCHANGES

Fruits may be fresh, dried, cooked, canned or frozen as long as no sugar is added.

One fruit exchange contains carbohydrate 10 gm.; protein and fat negligible.

	Amount
	to Use
Apple (2" dia.)	
Applesauce	
Apricots, fresh	
Apricots, dry	
Banana	1/2 small
Berries	
Blackberries	1 cup
Raspberries	
*Strawberries	1 cup
Blueberries	2/3 cup
*Cantaloupe (6" dia.)	1/4
Cherries	. 10 large
Dates	2
Figs, dried	1 small
Figs, fresh	2 large
*Grapefruit	1/2 small
*Grapefruit juice	1/2 cup
Grapes	. 12
Grape juice	1/4 cup
Honeydew melon (7"dia.)	1/8
Mango	1/2 small
Nectarines	1 medium
*Orange	1 small
*Orange juice	1/2 cup
Papaya	1/3 medium
Peach	1 medium
Pear	1 small
Pineapple	1/2 cup, cubed
Pineapple juice	1/3 cup
Plums	2 medium
Prunes, dried	2 medium
Raisins	2 tbsp. level
Rhubarb	(see List 2A)
*Tangerine	
Watermelon	1 slice (3 x 11/2") or
	1 cup diced

<sup>\*</sup>These fruits are rich sources of vitamin C; at least one serving each day should be used.

### LISTA BREAD EXCHANGES

One bread exchange contains carbohydrate 15 gm., protein 2 gm., fat negligible.

Bacco strague	Amount
changorontame arbbhyoote (bigni multi	touse
Bread	1 slice
Biscuit, roll (2" dia.)	1
Muffin (2" dia.)	
Cornbread (1½" cube)	1
Cereals, cooked	
Dry (flake, puff & shredded types)	3/4 cup
Rice, grits, cooked	1/2 cup
Spaghetti, noodles, cooked	1/2 cup
Macaroni, etc., cooked	
Crackers, graham (2½" sq.)	2
Oyster (1/2 cup)	20
Saltines (2" sq.)	5
Soda (21/2" sq.)	3
Round, thin	6
Vegetables	
Beans and peas, dried, cooked	
(lima, navy, split pea, cowpeas, etc.)	
Baked beans, no pork	1/4 cup
Corn	1/3 cup
Popcorn	1 cup
Parsnips	2/3 cup
Potatoes, white	1 small
Potatoes, white, mashed	1/2 cup
Potatoes, sweet, or yams	
Flour	21/2 tbsp.
Sponge cake, plain (11/2" cube)	
*Ice cream	

<sup>\*</sup>Omit 2 fat exchanges from your meal plan if ice cream is used.

### LIST 5 MEATIEXCHANGES

One meat exchange contains protein 7 gm., fat 5 carbohydrate negligible.

Amount

	to use
Meat and poultry (medium fat)(beef, lamb, veal, pork, liver, chicken, etc.)	
Cold cuts (4½" x ½" dia.)	references :
Frankfurter (8-9 per lb.)	
Fish (cod, haddock, halibut, herring, etc.).	
Salmon, tuna, crab, lobsterShrimp, clams, oysters	5 small
Sardines Cheese, Cheddar type.	
(American, Swiss, Parmesan, etc.)	

### लिंगा है स्था इस्क्रिय प्राची

One fat exchange contains fat 5 gm.; protein and carby hydrate negligible.

Amount

to use

Butter or margarine	 1 tsp. level
Bacon, crisp	
Cream, light (sweet or sour)	
Cream, heavy	 1 tbsp. level
Cream cheese	
Avocado (4" dia.)	
French dressing	
Mayonnaise	 1 tsp. level
Oil or cooking fat	
Nuts	
Olives	

#### **FOODS ALLOWED AS DESIRED**

The following foods and seasonings may be used as desired because they contain no appreciable carbohydrate, protein or fat when used in ordinary amounts.

Bouillon (fat free)	Garlic	Nutmeg	Saccharin
Celen salt	Gelatin, unsweetened	Onion, raw	Sucaryl'
Cinnamon	Herbs	Pepper	Spices
Clear broth	Lemon .	Pickle, sour or	Tea, plain
Coffee, plain	Mustard, dry	unsweetened diff	Vinegar
Cranberries unsweetened	Mint	Rennet tablets	

AMPHETAMINES HANDOUT

#### INCLOSURE 4

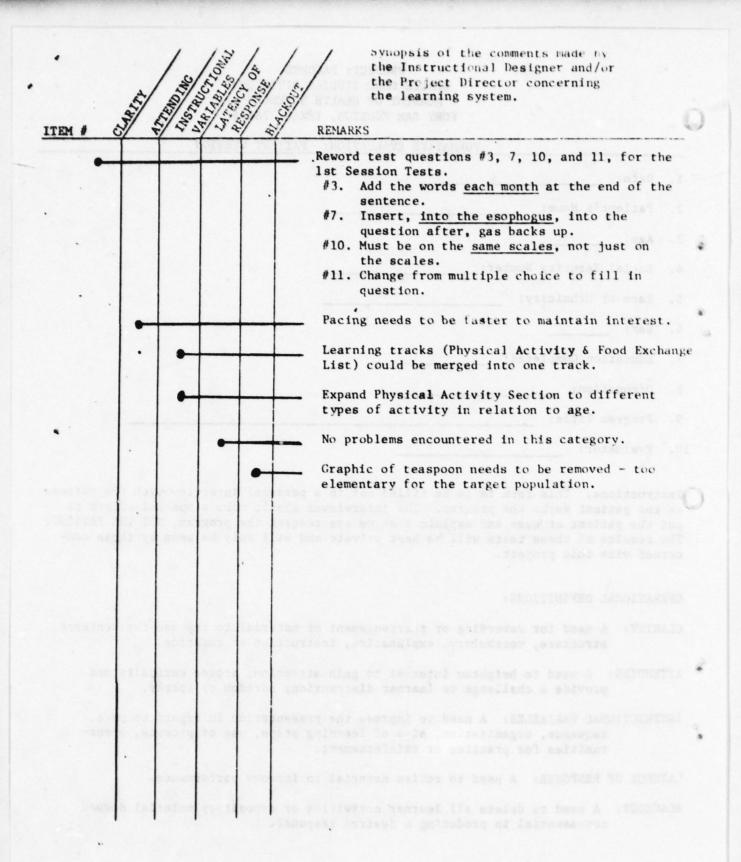
Formative Evaluation: Patient Version

FORMATIVE EVALUATION: PATIENT VERSION

-	1.	Date:
	2.	Patient's Name:
*	3.	Age:
	4.	Social Security Number:
*	5.	Race or Ethnicity:
	6.	Sex:
	7.	Education, Completed:
	8.	Occupation:
	9.	Program Title:
	10.	Evaluator:
	1	that - Services we as whose acceptant to address:
	as put The	tructions: This form is to be filled out in a personal interview with the patien the patient works the program. The interviewer should make a special effort to the patient at ease and explain that we are testing the program, NOT THE PATIENT results of these tests will be kept private and will only be seen by those conned with this project.
	OPE	RATIONAL DEFINITIONS:
	CLA	RITY: A need for rewording or rearrangement of material to improve the sentence structure, vocabulary, explanation, instruction or question.
	ATT	ENDING: A need to heighten interest to gain attention, arouse curiosity and provide a challenge to learner distraction, boredom or apathy.
	INS	IRUCTIONAL VARIABLES: A need to improve the presentation in regard to pace, sequence, organization, size of learning steps, use of prompts, oppor- tunities for practice or reinforcement.

LATENCY OF RESPONSE: A need to revise material to improve performance.

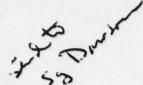
BLACKOUT: A need to delete all learner activities or expository material deemed nonessential in producing a desired response.



INCLOSURE 5

FORE SAM HOUSTON, TEXAS TRIBL'S

Physician Evaluation Form



PHYSICIAN/NURSE CLINICIAN EVALUATION FORM

DATE 1 JAN 75 FORMAT Videntage

SUBJECT CRAINTY PROPERLY?

EVALUATOR PROPERLY?

WHAT WOULD YOU ADD?

WHAT WOULD YOU DELETE?

IS THE CONTENT ORGANIZED PROPERLY?

IF NOT, HOW WOULD YOU CHANGE THE SEQUENCE?

ARE ALL THE CRUCIAL OBJECTIVES EMPHASION?

(BEHAVIORS OR KNOWLEDGE THE SEQUENCE)

T MUST MASTER IN ORDER TO COPE AND LIVE EFFECTIVELY WITH HIS DISEASE OR PROBLEM.

IF NOT, PLEASE ELABORATE.

ARE FAMILIAR SYMBOLS AND CONCEPTS USED TO HELP EXPLAIN UNFAMILIAR SUBJECT MATTER?

yer junte clear.

FOR WHAT PATIENT POPULATION WOULD YOU RECOMMEND THIS PRESENTATION?

Intelligent of molivated of see patients and

DO YOU FEEL THE PRESENTATION IS TOO LONG, TOO SHORT AND WHY?

Ok ig split into 2 periods

#### INCLOSURE 6

Final Staff Evaluation

#### FINAL STAFF EVALUATION

		Good Sense About Your Stomach,
SUBJECT: W	leight Control	TITLE: Overweight, Food Exchange List, &
	becate because	Physical Activity
WORKING TIME:	2 One Hour Sessions	DATE PRODUCED: 1975
FORMAT: Vid	leo-Tape	DATE EVALUATED: Nov 1975
PRODUCER: M	edFact, Inc. / Time/Lif	e / PACOMED
PRICE: See Co	st Analysis, Table 8,	INTENDED AUDIENCE: General/Adult
	atients have about indi	gestion, the relationship of weight vity, and how to use the food exchange
OBJECTIVES:	Met the basic requirement objectives.	ments of the learning system behavioral
following mat	erials to supplement th	It was necessary to develop the e learning system: Privacy Act phic Data Form, and the Behavioral
DEFINITION OF	SELF-INSTRUCTIONAL FEA	TURES
PRE-TEST		t the beginning of the instructional bject entry level (prior knowledge) of resented.
OBJECTIVES		the subject will be able to do upon n of the learning system.
PRACTICE	Questions or tasks i the criterion measur	n the instructional system similar to es.
POST-TEST		t the conclusion of the instructional ove the subject has learned the intended
FEEDBACK	Initial reactions to (interviewed comment	the instructional system by the patient s).

#### ATTITUDE

Measures feelings, emotions, or attitudes towards the instructional strategy, its concepts and contents.

Self-Instructional Features	First Version	Second Version	Third Version	Fourth Version
Pre-test	0 of 9	1 of 9	0 of 6	1 of 6
Session I	Passed.	Passed.	Passed.	Passed.
	0 of 9	0 of 9	0 of 6	0 of 6
Session II	Passed.	Passed.	Passed.	Passed.
Objectives	See Behavi	oral Objecti	lves	
Practice Practice	See Instru	ctional Syst	: em	
Post-test	8 of 9	9 of 9	5 of 6	6 of 6
Session I	Passed.	Passed.	Passed.	Passed.
	7 of 9	7 of 9	5 of 6	5 of 6
Session II	Passed	Passed.	Passed.	Passed.
Feedback	See Format	ive Evaluati	lon	
Attitude Scale	See Proces	s Evaluation	CONTRACTOR ON SELECTION	
Constituted and the				
TECHNICAL ASPECTS:				
	Poor Fai	r Good	Excellent	
Sound:		/		
DIKUTA I-LUMB MAYAB	And the last of		70 E/GE 7650()	
Photography:	National Contraction of the Cont		on of Mareja	

MATRIX FOR FIELD IMPLEMENTATION

TITLE: Weight Control

RECOMMENDATIONS	Write a new script to cover the same material, and shoot new graphics.	Artwork and live photographs should be improved.	Write a new script and improve live photography of the different foods.
SCRIPT	Script was a blend of MedFact's Weight Control & Teenage Weight Control	N/A	Convert workbook into video- script.
SOUND	Record new sound track.	N/A	N/A
PHOTOGRAPHY	New graphics Record new will have to sound track be produced by TASO artists.	N/A	New graphics will have to be produced by TASO artists.
COPYRIGHT	Permission to convert to video- tape would have to be secured.	N/A	Permission to convert to video- tape would have to be secured.
PRODUCER	MedFact	PACOMED	American Diabetic Associa- tion
TRACK	Weight Control	Physical Activity	Food Exchange List

#### APPENDIX 4

FORMATIVE EVALUATION

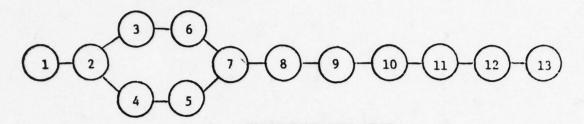
(1)-(11)-(12)-(13)

Breast Self-Examination

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#### SUMMARY NETWORK OF INSTRUCTIONAL DESIGN FOR

#### BREAST SELF-EXAMINATION.



#### EVENT IDENTIFICATION

- 1. Topic Selected: Breast Self-Examination
- 2. Met with Content Consultant, p. 219.
- 3. Develop Behavioral Objectives, p. 219.
- 4. Conduct "Real World" Search for Existing Educational Software on Breast Self-Examination, p. 219.
  - 5. Evaluate Existing Educational Software, p. 219.
  - 6. Write Criterion Measures (Pre-test Post-test), p. 219.
  - Design Instructional System. (See Instructional System for Breast Self-Examination, p. 219.
  - Conduct Formative Evaluation, p. 220 (See Formative Evaluation Form, Incl 4.)
  - 9. Data Collection, p. 220.
- 10. Revisions, p. 222.
- 11. Conduct Physician Evaluation, p. 223. (See Physician Evaluation Form, Incl 5.)
- 12. Cost Analysis, p. 223 & Table 8, p. 231.
- 13. Final Staff Evaluation.p. 223 & Incl 6, Final Staff Evaluation Form.

#### 1. INTRODUCTION.

a. The following is a chronological representation of the systems approach to instructional design after the topic selection was made. Each event, as it appears in the Summary Network of the Instructional Design (p. 218), will be discussed in detail (Refer to corresponding numbers in the summary.) to give the reader the proper perspective of the total developmental process.

#### (2) Initial Contact With the Content Consultant.

(a) In December 1975, the Instructional Designer met with the Content Consultant to outline the behavioral objectives for the instructional learning system on Breast Self-Examination.

#### (3) Behavioral Objectives.

(a) The Breast Self-Examination behavioral objectives are statements of tasks that the patient will be able to perform upon successful completion of the learning system. See Inclosure 1, page 232, for a list of these objectives.

#### (4) "Real World" Search.

(a) There was a limited amount of educational software available that dealt with Breast Self-Examination. Two programs were selected that met the behavioral objectives mentioned above.

#### (5) Existing Educational Software Evaluation.

(a) Evaluation of the existing educational software was conducted and documented on the Initial Staff Evaluation Forms attached at Inclosure 2, a and b.

#### (6) Criterion Measures.

(a) The criterion measures were written to determine the subject's entry level, (pre-test score), insure that the instruction taught the objectives (tasks the subject must master), and that the instructional system was effective (minimum of 80 percent competency level). See Inclosure 3.

#### (7) Breast Self-Examination Instructional System.

(a) The following is a list of the forms necessary to adminster the instructional strategy for Breast Self-Examination. These forms represent the paperwork actually encountered by each patient when s/he was given the learning system. Each form, including the learning track, falls in the proper order of sequence. See Inclosure 3, a-f.

a) Privacy Act Statement

b) Demographic Data: Breast Self-Examination

c) Breast Self-Examination Information (Pre-test)

d) Breast Self-Examination Objectives

e) Educational Intervention: Introduction to Breast Anatomy/

Self-Examination

ation

f) Educational Intervention: Teaching Breast Self-Examin-

g) Breast Self-Examination Information (Post-test)

#### (8) Formative Evaluation.

- (a) During the formative evaluation stage for Breast Self-Examination, the system was tested on a combination of subjects from the nursing staff, non-professional MEDDAC personnel, and patients from the Family Practice Clinic. The Project Director and/or the Instructional Designer was present for each instructional session to evaluate the subject's reaction to the learning system. If the subject encountered learning problems during the presentation of the learning strategy, the difficulties were noted on the Formative Evaluation: Patient Version Form (See Inclosure 4) so that the necessary revisions could be made.
- (b) At the conclusion of the learning session, each subject was interviewed to obtain comments concerning his/her personal feelings about the program. Information is provided as follows:
  - What were the most difficult parts of the lesson?
    "The anatomy section."
  - What was the best feature of the instruction? "Much more complete than I have ever had before." "I liked the demonstration model (Betsi Breast)." "Actually got to see the breast as it appears during the examination." "It told me what to look for."
  - 3 What was the worst feature of the lesson?

"The tests were somewhat difficult to understand."

(9) Data Collection.

The following is a compilation of demographic, test (prepost), and process evaluation data.

#### (a) Demographic Data.

1 A total of 30 individuals were used as subjects during the formative evaluation stage for Breast Self-Examination. These subjects were comprised of a cross section of the nursing staff, non-professional MEDDAC personnel and patients from the Family Practice Clinic.

- 2 Source Breakdown: There were 16 patients from the Family Practice Clinic, five nursing service personnel, and nine non-professional MEDDAC personnel used as subjects.
- 3 Sex Breakdown: This evaluation was comprised of the following: 27 female subjects and 3 male subjects.
- 4 Age Breakdown: Twenty-three subjects were in the 15-25 year age group, four from 26-35 years of age, and three from 36-45 years of age.
- 5 Occupation Breakdown: The occupation data is as follows: Seventeen housewives, six students, two administrative personnel, and five AMEDD professional personnel.
- 6 Marital Status: The marital status information is provided as follows: Twenty-three married subjects, six single subjects, and one engaged subject.
- 7 Educational Level Data: Nineteen subjects had a high school education, seven subjects had attended 1-3 years of college, three subjects had obtained a Baccalaureate Degree, and one subject had obtained a Master's Degree.
  - (b) Pre and Post-test Data Collection.
- 1 There were three versions of the pre and post-tests. The first version of pre and post-tests had 37 possible correct responses. The second and third versions of pre and post-tests had 32 possible correct responses. The first version was judged to be ineffective and in need of major revision. The following is a breakdown of the results of the second and third pre and post-test results only.
- <u>a</u> Pre-test Score Range: Of the 16 subjects, the highest number of correct responses was 25 and the lowest number of correct responses was three.
- b Post-test Score Range: Thirty-two was the highest number of correct responses and 20 was the lowest number of correct responses.
- c Total Scores Pre-test: 279 correct responses out of 480 possible points = 84 percent, the average percentage correct.
- d Total Scores -- Post-test: 405 correct responses out of 480 possible points = 84 percent, the average percentage correct.
- (The average percentage scores were derived by dividing the total number of correct responses of the 30 subjects by the total possible points.)

#### (c) Correct Response Analysis.

<u>l</u> The pre and post-tests were evaluated to determine areas to be strengthened or revised. Each subject's test responses were listed according to the corresponding behavioral objective and criterion measure. See Tables 1 and 2, pages 224-225, for the Correct Response Analysis, Pre-test and Post-test. (These tables reflect second and third test revision data only, see para 10. Revisions for first version pre and post-test results.)

#### (d) Process Evaluation.

1 The process evaluation measured the opinions toward the instructional strategy. The results are as follows: As a result of this learning experience, 22 subjects thought they had misconceptions about Breast Self-Examination. Eight felt they had no misconceptions. Twenty-two subjects thought the learning experience clarified these misconceptions.

2 Seven subject areas (Physical Setting/Health Educator/Audio-Visual Equipment/Patient Education Programs/Paperwork/Patient Learning Concept/and Other) were listed in the Comment Section of the Process Evaluation Form. The majority of the subjects' comments were "good," or no comment at all. See Table 3, page 226, for the Tabulation of Process Evaluation Responses.

#### (10) Revisions.

(a) The second and third version results of Breast Self-Examination Information Pre and Post-test results are shown on the Total Pre and Post-test Scores, Table 4, page 227. The revisions brought the third version test scores up to the 80 percent competency level for 100 percent of the test population.

#### 1 Rationale for the Revision on the Pre and Post-tests.

<u>a</u> During the initial testing phase of the learning system, it was noted that the technical aspects of breast anatomy were causing comprehension problems for the test population. This was evident in both the video-tape and the test. See Tables 5-7, pages 228-230, for the results of the first version tests.

<u>b</u> The video-tape was revised to pace the instruction slower to aid comprehension, and the test was re-written to clarify the multiple responses.

<u>c</u> The second version was tested, and proved to be very effective, however, there were pronunciation problems within the audio track. The video-tape was re-recorded and tested during the third version trial. This third version proved to work very well.

#### (11) Physician Evaluation.

(a) Upon completion of the revisions in the learning strategy, the Content Consultant (physician) reviewed the entire program and evaluated the content for target population. See Inclosure 5, Physician Evaluation Form.

#### (12) Cost Analysis.

(a) The following (See Table 8, page 231) is an analysis of the costs inherent in developing a learning system for Breast Self-Examination. The costs are listed in three separate categories: 1) hardware (equipment), 2) software (educational materials), and 3) administrative (salaries, reproduction costs, etc.). For further cost information, see Appendix 9, pages 471-473, Current Baseline Information and Cost Analysis.

#### (13) Final Staff Evaluation.

(a) Upon completion of the formative stage of the evaluation, the learning system was evaluated as a total package. See Inclosure 6, Final Staff Evaluation Form.

BREAST SELF-EXAMINATION INFORMATION CORRECT RESPONSE ANALYSIS - PRE-TEST

TABLE 1

BEHAVIORAL OBJECTIVES	CRITERION MEASURES (Incl 3-c)	RESPONSE ANALYSIS	NUMBER OF INCORRECT RESPONSES*
1	1	+++++++	(9)
2	2	++-++-+++	6
3	3	+++-+++++-	0
- Securit 4.5		++-++-++-++-+	5
4	4	++++++++++++	1
5	5	++++++-++	4
6	6	++++++++-	6
7&8	7	++++++++++++++	0
		+-+++++++++	5
9,10,&11	. 8	++++++-+	5
		++++++++++++	4
		-+++++++-+-+	5
12&13	9	+-+++++-++-+	3
		+-+++++++-	6
		+++++++++++	4
		+++++++++++++++	0
14	10	+++++++++++++	3
15	11	++++-+++++++++	1
16	12	-+++++++++++++	1
17	13	++++++++	6
18	14	++++++++++++++++	1
		++-++++	5
19	15	++++++++++++++	3
20	16	++++++++++++	4
21	17	++++++++++	4
		++++++++++++++	0
		+-++++	6
19	18	-++++++++	5
		+ + + + + + + + + + + +	4
21	19	-+++++++++++++	1
		++++++++++++++	0
		+++-++++++	4

- = INCORRECT RESPONSE

+ = CORRECT RESPONSE

• = CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

<sup>\*</sup>RESULTS TABULATED ON THE PRE-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN SEVEN INCORRECT RESPONSES WERE REVISED.

TABLE 2

### BREAST SELF-EXAMINATION INFORMATION CORRECT RESPONSE ANALYSIS - POST-TEST

BEHAVIORAL OBJECTIVES	CRITERION MEASURES (Incl 3-f)	RESPONSE ANALYSIS	NUMBER OF INCORRECT RESPONSES*
1	1	+++++++++++++++	0
		++-++++++++++	2
		-+++++++++++++	1
2	2	++++++++++++++	0
		++++++++++++++	0
3&4	3	++++++++++++	1
		++-++++++++++	1
		++++++++++++	3
5	4	+++++++++++++++	1
6	5	++++++++++++++	2
7	6	+++++++++++++++	0
		++++++++++++++	0
8	7	++++++++++++++	1
9	8	+++-+++++++++++	3
10	9	+++++++++++++++	1
11	10	++++++++++++++	0
12&13	11	+++++++++++++++	0
		+++++++++++++++++++++++++++++++++++++++	3
		-+++-++++++++	3
		+++++++++++++++	0
14	12	++++++++++++++	0
		++++++++++++++++	3
		+++++++++++++++++++++++++++++++++++++++	2
15	13	++++++++++++++	2
		+++++++++++++++	0
16	14	++++++++++++++	0
17	15	-++++++++++-	2
18	16	+++++++++++++++	0
19&20	17	+++++++++++++++	0
		++++++++++++++++	3
21	18	++++++++++++++	1
		+++++++++++++	C

+ = CORRECT RESPONSE

CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

\*THERE WERE NO REVISIONS NECESSARY ON THE THIRD VERSION OF THE POSI-ILST.

TABULATION OF PROCESS EVALUATION RESPONSES BREAST SELF-EXAMINATION

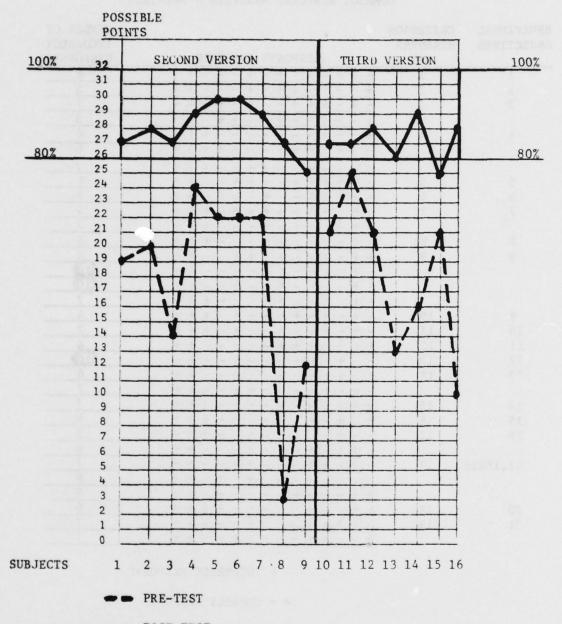
TABLE 3

ltem	-	-	Opinion		
	2	3 2	23	$\frac{2}{4}$	0
Viewing Time	Too Short	2	<u>ок</u>	4	Too Long
	0	$\frac{0}{2}$	23	4	1
Content Interest	Boring	2	<u>з</u> ок	4	5 Fascinating
	0	0	24	4	2
Questions on Topic	No Help	2	24 3 OK	4 R	Seally Helpe
	0	0	28	2	0
Pace	Too Slow	0/2	28 3 OK	4	Too Fast
	0	0		10	6
Content Uniqueness	Old Stuff	2	14 OK	4	All New
	old Star.	,	4 4 5 4 4	2	2
Content Value	No Value	$\frac{2}{2}$	24 3 OK	4	ost Valuable
	No value				ost valuable
Learning Lab Technicians' Style	0 1	0 2	10	14	5
	Poor		OK		Excellent
Learning Center	0 1	$\frac{0}{2}$	$\frac{14}{3}$ .	12	<u>4</u> 5
	Poor		OK		Excellent
Preference for Instruction	10	$\frac{11}{2}$	6 3	$\frac{2}{4}$	1/5
	A/V Mode		Neutral	L.	ive Teacher
Freedom to learn by	0 1	$\frac{4}{2}$	14	64	5 5
Instructions	Less Freedom		Equa 1	M	ore Freedom
Personal responsibi-					
by A/V compared to	0	$\frac{2}{2}$	7 3	$\frac{21}{4}$	0 5
health workers	Less	Ì	Equa 1		More
Patient attitude	0	$\frac{2}{2}$	4	23	0 5
toward A/V modes for mealth education	Poor		Neutral		Excellent
Patient viewing of	4	18	2	2	4
commercial TV in hours luring the day	Less Than	-1-	Hours		More Than

Tabulations Rating Scale

TABLE 4
BREAST SELF-EXAMINATION

### BREAST SELF-EXAMINATION TOTAL PRE AND POST-TEST SCORES



POST-TEST

TABLE 5

BREAST SELF-EXAMINATION INFORMATION
CORRECT RESPONSE ANALYSIS - PRE-TEST

BEHAVIORAL OBJECTIVES	CRITERION MEASURES (*)	RESPONSE ANALYSIS	NUMBER OF INCORRECT RESPONSES*
1	1	-++-+-++	8
2		+++++++	5
3	2 3	-+-++++++	7
		+++-+-++	5
4	4	++++++	8
		-++-	6
		+++++	7
5	5	-++++-++-++	4
6	6	-++++++	7
7	7	-+-+-+++++++	4
		-++++	7
8	8	++-++++	5
9	9	++-+++++-++	4
		-+++	(10)
		-+++	10
		++-++++	7
9	10	-+-+-++++-++	4
10	11	-+-++-++	7
11	12	++++++-+-++	4
12	13	++	10
13	14	+-++++	8
		-+-++++	7
14	15	++-++++	7
15	16	+-++++	9
16	17	+++	9
		+++-+++	8
17,18&19	17	_ + - + + + + + +	7
		++++	8
		++-+++	9
20	18	-++++	8
21	19	-+++++	7
		+++++	7

- = INCORRECT RESPONSE

+ = CORRECT RESPONSE

CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

<sup>\*</sup>THIS ENTIRE TEST WAS REVISED BECAUSE IT WAS NOT DISCRIMINATING AND NEEDED VOCABULARY CHANGES.

TABLE 6

BREAST SELF-EXAMINATION INFORMATION
CORRECT RESPONSE ANALYSIS - POST-TEST

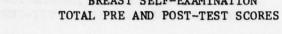
BEHAVIORAL DBJECTIVES	CRITERION MEASURES		NUMBER OF INCORRECT
	(*)	RESPONSE ANALYSIS	RESPONSES
1 00	1	++++++++++++	nel 1 11
		++++++++	4
2 3 & 4	2	+-++-++++++	3
3 & 4	3	++++++++++++	1
		+++++++++++	2
		+-++++++++++	2
5 & 6	4	+-++-+-+++	3
		+++-+++++	3
		+++++++++++	0
7	5	++-+-++++++	3
8	6	-++++++++++	2
		++++-+++++++	2
9	7	+-+++-++++++	3
10	8	++++-++++++	2
11	9	++++++++++++	0
12	10	++++++++++++	0
13	11	+++++++++++++	0
		++++++++++++	1
		++++++++++++	0
		++++++++++	2
14	12	-++++++++	4
15	13	+++++++++++	1
		++++-+-++	4
16	14	+++++++++++	1
17	15	+++++++++++	0
18	16	+-+++++++++	2
		+++++++++	2
	5.	++++-+++	4
19	17	+++++++++++	1
		++-++++++	3
20	18	+++++++++++	1
21	19	+++++++++++	0

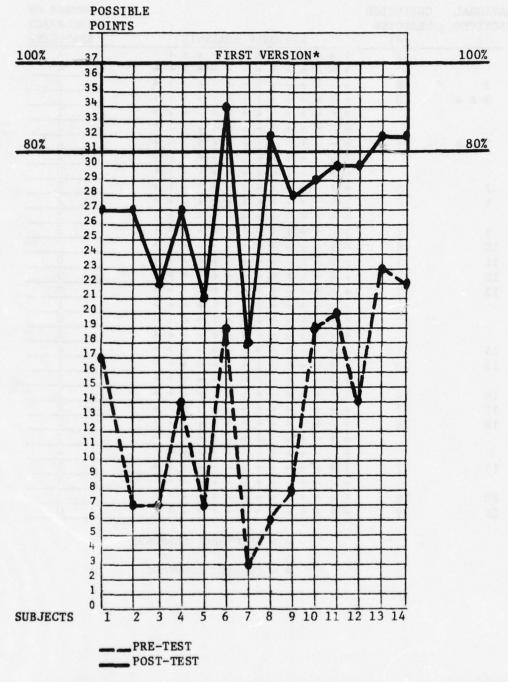
<sup>- =</sup> INCORRECT RESPONSE

<sup>+ =</sup> CORRECT RESPONSE

<sup>\*</sup>THIS ENTIRE TEST WAS REVISED BECAUSE IT WAS NOT DISCRIMINATING AND NEEDED VOCABULARY CHANGES.

TABLE 7
BREAST SELF-EXAMINATION





\*IT WAS DETERMINED THAT MAJOR REVISIONS WERE NECESSARY IN THIS VERSION OF THE PRE AND POST-TEST. SEE PAGE 222, RATIONALE FOR THE REVISION ON THE PRE AND POST-TESTS.

TABLE 8
BREAST SELF-EXAMINATION COST ANALYSIS

	DEVELOPMENTAL AND INVESTMENT	RECURRENT
HARDWARE	COSTS (Price per Unit)	COST PER HOUR
SONY Video Tape Recorder TV Monitor	Price per unit no longer needs to be added. Initial investment cost was anno-	\$0.147 .081
Headphones	tated under hypertension.	.002
Listening Center	Breast Salt-Symmoston Obj.	.002
Maintenance	For each piece of equip- ment = l¢/Unit Hour	.04
SUB-TOTAL	-0-	\$0.27
SOFTWARE		
PACOMED Script (Advanced Organizer)	0	\$0.032
PACOMED, OMNI/RVS SLIDES, & STUDY GUIDE: Introduction to Breast Care	\$100.00	.017
OMNI: Teaching Breast Self-Exam	167.00	.028
OMNI: Betsi Breast Model	125.00	.020
SUB-TOTAL	\$392.00	\$0.10
TOTAL		\$0.37
ADMINISTRATIVE COSTS		
Developmental	\$454.00	
Typing & Reproduction	132.00	
Paperwork to Individualize Strategy		\$0.09
SUB-TOTAL	\$586.00	\$0.09
TOTAL	\$978.00	\$0.46

### INCLOSURE 1

Breast Self-Examination Objectives

#### BREAST SELF-EXAMINATION OBJECTIVES

Upon completion of this program the patient will be able to:

- List the types of tissue in the breast, example: glandular, fibrous and fat.
- 2. Name the tissue which runs immediately under the breast skin.
- 3. Describe the functions of Cooper's Ligaments.
- 4. List two factors which determine the amount of fat tissue in the breast.
- 5. State the function of the lymphatic system.
- Tell why the lymphatic system is significant in breast cancer patients.
- 7. Define Metastasis.
- 8. Identify the breast as the most common site of cancer in women.
- 9. List the expected cure rate when breast cancer is detected and treated in its early stages.
- 10. Specify two things all women can do to help bring about a significant decline in the breast cancer death rate. Example: Professional and self-examination.
- 11. Tell at what time during the menstrual cycle breasts should be examined.
- 12. List changes in the breast to look for when doing breast selfexamination. Example: Dimpling, orange peel skin, discharge.
- 13. Tell the reason for looking at the breasts with arms over the head and with hands squeezing the waist.
- 14. Tell what the third part of the visual exam consists of. Example: Discharge from the nipple.
- 15. Name two signs to look for in the third part of the breast self-examination. Example: bleeding, other discharge, etc.

#### Breast Self-Examination Objectives Cont'd

- 16 Tell why to begin the examination when the skin is wet.
- 17. Show how the fingers are held in relation to the breast to do correct breast self-examination.
- 18 Describe the correct technique for examining the breasts.
- 19. Explain why a second examination is done in the prone position.
- 20. Tell what should be done if a lump in the breast is found.
- 21. With the aid of the Betsi Breast Teaching Model, the patient will demonstrate the following:
  - 1) Correct technique for breast self-examination.
  - Ability to detect breast lumps by finding four (4) lumps in the breast model.

#### INCLOSURE 2

nearly breast Self-Transporter

estantM test IMIT UNIDES eres orbit Takko:

### BREAST SELF-EXAMINATION INITIAL STAFF EVALUATION FORMS

course to a particular and militarian bard & a commander on a principle went and

#### INITIAL STAFF EVALUATION FORM

SUBJECT Breast Self-Examination	TITLE Teaching Breast Self-Examination
WORKING TIME 7:45 Minutes	DATE PRODUCED 1974
FORMAT Video tape	DATE EVALUATED Aug 1975
PRODUCER Ortho Pharmaceutical Corp.	PURCHASE/RENTAL SOURCE Same
Raritan, NJ 08869	
PRICE	
AVAILABILITY: CONTRACT PRODUCER OR COORDINA	TOR DIRECTLY.
SYNOPSIS Video tape shows how to examine the	
cedure to a patient and allowing her time to	
INTENDED AUDIENCE Adult/High School	
OBJECTIVES Meets basic behavioral objective	a requirements
Meets basic benavioral objective	e requirements.
TECHNICAL ASPECTS:	
SOUND: POOR FAIR GOOD X E	EXCELLENT
	EXCELLENT X
SPECIAL STRENGTHS AND/OR WEAKNESSES Needs p	
STECIAL STRENGTHS AND ON WELLENDOOD	
COULD THIS FORMAT WORK EFFECTIVELY BY ITSELF	22
EXPLAIN: With the mentioned forms, this vi	deo-tape would work well as a demonstration
track on breast serr-examination.	
COULD THIS SUBJECT/FORMAT (PACKAGE) BEST BE	USED AS A SUPPLEMENT TO OTHER INSTRUCTION?
YES XX NO	)
EXPLAIN: Demonstration track (2nd track) o	f total breast self-examination system.
POSITION. INSTRUCTIONAL DESIGNER	

AHS FORM 15 (PACOMED) 25 Mar 1975

#### INITIAL STAFF EVALUATION FORM

SUBJECT Breast Self-Examination	TITLE Introduction to Breast Care			
WORKING TIME -	DATE PRODUCED No patent data available			
FORMAT Booklet & Slides	DATE EVALUATED Sept 1975			
PRODUCER Relevant Visual Systems	PURCHASE/RENTAL SOURCE Same			
190 W. Main St. , Somerville, NJ	NOTONI .			
PRICE				
AVAILABILITY: CONTRACT PRODUCER OR COORDI	NATOR DIRECTLY.			
SYNOPSIS The slide series shows the anato				
examination.				
INTENDED AUDIENCE Adult/High School OBJECTIVES Meets basic behavioral object	ive requirements.			
TECHNICAL ASPECTS: SOUND: POOR FAIR GOOD	EXCELLENT No sound track.			
PHOTOGRAPHY: POOR FAIR GOOD X				
SPECIAL STRENGTHS AND/OR WEAKNESSES Need	s audio track in order to individualize.			
The slides also need the behavioral object	ives, and pre/post-tests.			
COULD THIS FORMAT WORK EFFECTIVELY BY ITSE	ELF? No			
EXPLAIN: Not without the audio track.				
COULD THIS SUBJECT/FORMAT (PACKAGE) BEST B YES XX	BE USED AS A SUPPLEMENT TO OTHER INSTRUCTIONO			
EXPLAIN: Once converted to video tape this	s series would serve well as an introductor			
track on the anatomy and mechanics of breas	st self-examination.			
POSITION: INSTRUCTIONAL DESIGNER				

AHS FORM 15 (PACOMED) 25 Mar 1975 2-b

# INCLOSURE 3

Breast Self-Examination Instructional System Forms

to answer the transfer and the first and the second and the second

### PRIVACY ACT STATEMENT (5USC 552a)

1. Authority for collection of information including Social Security Number:

Section 3012, Title 10, US Code.

2. Principal purposes for which information is intended to be used:

To assist medical research personnel in the monitoring of individual patient performance and in evaluation of the PACOMED concept. The last four digits of the SSN identifies the patient and allows for computer consolidation, comparison, and retrieval of individual data, and cross reference with the outpatient record if required.

#### 3. Routine uses:

This information may be used in research pertaining to the planning and development of a prototype patient and community health staff education module; in the establishment of an objective and behavioral data bank; and in the development of appropriate medical instructional systems. Individual data may be used in analysis and discussion with other AMEDD personnel and consolidated in research reports for general release. No information that identifies any individual patient or physician will be released.

- 4. Providing of this information is voluntary but failure to provide will result in your exclusion from the research project.
- 5. The following forms are currently in use with this statement:

AHS Form 171 Demographic Data: Breast Self-Examination
Pre Test Breast Self-Examination Information

Post Test Breast Self-Examination Information

AHS Form 172 Demographic, Baseline Data, & Test Scores: Breast

Self-Examination

AHS Form 172a Process Evaluation: Breast Self-Examination
AHS Form 172b Six Month Follow-Up Data: Breast Self-Examination

Scale Nelson-Denny Scale Scale Rotter's I.E. Scale

## PROJECT: PACOMED HEALTH CARE STUDIES DIVISION ACADEMY OF HEALTH SCIENCES

Demographic Data: Breast Self-Examination

INSTRUCTIONS: Please answer each item by supplying the correct information. If you have any questions, do not hesitate to ask the health educator.					
FULL NAME:	reter al mole-ma	THE STATE OF THE STATE SHOPS			
ADDRESS:	dat in the nami	NOW YER LONGON	Trackbass to La	ng of	
(Stree	t)	(City)	(State)	(Z1p)	
TELEPHONE NUMBERS:	Home	Work			
	ts of sponsor's			and t	
. Patient's stat	us: (Circle one				
	Service Memb	per Depende	nt saye sano		
. Sponsor's Rank	/Status	olari jelli andre h			
. Age last birth	day:				
3719 22 9711136		Li evidenzezat			
Occupation: _					
. Marital Status		Albanios sim so			
	Married:	Engaged:	are 17 Head		
	· Widowed:	Divorced:	ngaë ass		
	Single:	Separated			
. Education compl					
	Elementar (1st-6th	y School			
		of tak yoursel-go			
	Junior Hi	gn School			
	(7th-8th	grade)			

8.	Education completed: cont'd		
	1 to 3 yrs college	Sceast 3	
	Baccalaureate Degree _	100	
		strait was	
	Doctor's Degree	io aka un	
9.	Number of children:		
10.	Your age when your first child was born:	0	
11.	Your age when your last child was born:	24 X	
12.	Did you breast feed your children?	17	
	a. How many:		
	b. How long for each child:	i basa I	e at louis
13.	Do you have a family history of Cancer of the	he:	
		Colon	b ou
		Breast	
		Uterus	one:
		Cervix	1.08 . 18 18 18
14.	What age were you at marriage:		
15.	Date of last breast self-examination:		
15. 16.	Previous breast biopsies	.0160b 30	281
	Previous breast biopsies	Lawon go	revi z 11

### Breast Self-Examination Information Pre-test

INSTRUCTIONS:	Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answers that question. Mark an "X" on the line or lines in front of your answer(s).	
EXAMPLE:	Boston is the capital of:	
	Connecticut	
	X Massachusetts	
	Vermont	
1. When perfo	orming the prone examination, a small pillow or folded placed:	
uno	der the shoulder opposite the breast being examined.	
	der the shoulder on the same side as the breast being amined.	
uno	der both shoulders.	
2. Breast sel	If-examination should begin by examining yourself:	
si	tting at a table.	
in	a shower or bath.	
1y:	ing down.	
3. If a lump	is found you should:	
wat	tch it for a week or two to see if it goes away.	
ca!	ll a doctor immediately.	
The state of the s	main calm and remember that cancer is curable if detected it treated soon enough.	

#### Breast Self-Examination Information

4. A second examination is done lying on your back to:

spread the breast tissue over the chest wall.

relax any tension you might have.

cause the lumps to be more visible.

5. In relation to the breast (in order to do a correct breast selfexamination) the fingers should be:

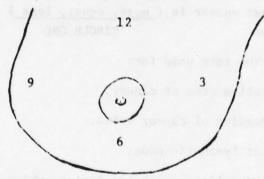
slightly curved.

flat but apart.

curved to use just the finger tips.

flat and close together.

Indicate where you would begin the "Feeling" part of the breast self-examination by circling the appropriate number.



7. Select the two significant signs to look for during the visual examination.

Discharge

Tender areas

Lumps

Bleeding

8. The reason for looking at the breasts with the arms over the head and also with the hands squeezing the waist is:

to see if your breasts had a size change since you last examined them.

\_\_\_\_ to check for dimpling.

\_\_\_\_ to check for discharge.

#### Breast Self-Examination Information

9.	Which of the following are changes in the breast to be looked for during the breast self-examination?	U
	Dimpling Orange peel skin	
	Bleeding Discharge from the nipple	
10.	At what time during the menstrual cycle should the breasts be examined?	2
	The day the menstrual flow begins.	
	The day the menstrual flow stops.	
	Any day during the menstrual flow.	
11.	If detected early, the expected cure rate of breast cancer is:	
	60% 75% 80%	
	85% 87% 95%	
12.	In women, breast cancer is ( <u>more, equal, less</u> ) common then other forms of cancer CIRCLE ONE	
13.	Metastasis is the term used for:	0
	A controlled area of cancer.	
	The spreading of cancer cells.	
	Malignant lymphatic nodes.	
14.	From the following list, check two factors which determine the amount of tissue in the breast.	
	Nutrition Hormonal changes	2
	Exercise Heredity	
15.	The tissue that runs immediately under the skin is referred to as:	
	Cooper's Ligaments Subcutaneous	
	Fat Glandular	

Breast Self-Examination Information	
16. The function of Cooper's Ligaments is:	
To filter infection.	
To provide freedom of movement of the breast.	roqti
To assist in milk production.	
17. The three types of tissue in the breast are:	
Fibrous Lymphatic	
Fat Glandular	
18. The lymphatic system is significant in breast cancer because:	
It spreads the cancer.	
It controls the spread of cancer.	
It filters the cancer producing agents and confines the	em
to a small area or lump.	
19. The two functions of the lymph nodes are to:	
Stop solid particles or bacteria.	
Produce lymphocytes.	
Fill the different lymph vessels.	
Tell what the chird part of the visual axem constant of. Emanple: Simpler Stocharge from the migple.	
Mana ore signs to look for in the chird part of the breast self-ermination, business blacking, other discharge, erc.	

#### BREAST SELF-EXAMINATION OBJECTIVES

Upon completion of this program the patient will be able to:

- . List the types of tissue in the breast, example: glandular, fibrous and fat.
- . Name the tissue which runs immediately under the breast skiu.
- . Describe the functions of Cooper's Ligaments.
- . List two factors which determine the amount of fat tissue in the breast.
- . State the function of the lymphatic system.
- Tell why the lymphatic system is significant in breast cancer patients.
- . Define Metastasis.
- . Identify the breast as the most common site of cancer in women.
- . List the expected cure rate when breast cancer is detected and treated in its early stages.
- . Specify two things all women can do to help bring about a significant decline in the breast cancer death rate. Example: Professional and self-examination.
- . Tell at what time during the menstrual cycle breasts should be examined.
- . List changes in the breast to look for when doing breast selfexamination. Example: Dimpling, orange peel skin, discharge.
- . Tell the reason for looking at the breasts with arms over the head and with hands squeezing the waist.
- . Tell what the third part of the visual exam consists of. Example: Discharge from the nipple.
- Name two signs to look for in the third part of the breast self-examination. Example: bleeding, other dischargε, etc.

## Breast Self-Examination Objectives Cout'd

- . Tell why to begin the examination when the skin is wet.
- . Show how the fingers are held in relation to the breast to do correct breast self-examination.
- . Poseribe the correct technique for examining the breasts.
- . Explain why a second examination is done in the prone position.
- . Tell what should be done if a lump in the breast is found.
- . With the aid of the Betsi Breast Teaching Model, the patient will demonstrate the following:
  - 1) Correct technique for breast self-examination.
- 2) Ability to detect breast lumps by finding four (4) lumps in the breast model.

EDUCATIONAL INTERVENTION: INTRODUCTION TO BREAST ANATOMY/SELF-EXAMINATION

With the sid of the Betel Breast Teaching Model, the parison will

Left why to begin the examination when the skin is not

EDUCATIONAL INTERVENTION: TEACHING BREAST SELF-EXAMINATION

## Breast Self-Examination Information

-			1091 1091	<b>m</b>
INS	TRUCTIONS:	may hav	ach statement carefully. The statements listed we more than one correct answer. Decide which or choices best answers that question. Mark on the line or lines in front of your answer(s)	
E	XAMPLE:	Boston	is the capital of:	
			Connecticut	
		<u>x</u>	Massachusetts	
			Vermont	
1.	The two fur	nctions	of the lymph nodes are to:	EDUCATI
	Sto	solid	particles or bacteria.	
	Pro	duce lym	aphocytes.	0
	Fil:	the di	fferent lymph vessels.	U
2.	The lympha	tic syst	em is significant in breast cancer because:	
	It	spreads	the cancer.	
	It	ontrols	the spread of cancer.	
			the cancer producing agents and confines them area or lump.	
3.	The three	ypes of	tissue in the breast are:	:
	Fib	rous	Lymphatic	
	Fat		Glandular	*
4.	The function	on of Co	oper's Ligaments is:	
	То	ilter i	nfection.	
	То ;	provide	freedom of movement of the breast.	
	То	ssist i	n milk production.	

•	The tissue that runs as:	a asla a f						
	Cooper's Liga			Subcut				
	Fat			Glandu	lar			
	From the following l amount of tissue in							
	Nutrition	1 NOOT 01	Hormona		100			
	Exercise	ta tabuat	Heredit	у				
	Metastasis is the te	rm used fo	r:					
	A controlled	area of ca						
	The spreading	of cancer	cells.			in Laws		
	Malignant lym	phatic nod	les.					
	Malignant lym In women, breast can			al, le	ss) co	mmon th	en ot	he
					ss ) co	mmon th	ien ot	he
	In women, breast can	cer is (_m	CIRCLE	ONE				he
	In women, breast can forms of cancer.	cer is (_m	CIRCLE	ONE				he
	In women, breast can forms of cancer.  If detected early, t	cer is (_m	CIRCLE	ONE	breast			he
	In women, breast can forms of cancer.  If detected early, t	cer is (_m he expecte 75% 87%	CIRCLE	ONE ate of	breast 80% 95%	cancer	is:	he
	In women, breast can forms of cancer.  If detected early, to 60%  85%  At what time during	the expecte	CIRCLE d cure r	ONE ate of e shoul	breast 80% 95% d the	cancer	is:	he
	In women, breast can forms of cancer.  If detected early, to 60% 85%  At what time during examined?	the expecte 75% 87% the menstr	CIRCLE d cure r	ONE ate of e should	breast 80% 95% d the	cancer	is:	he
	In women, breast can forms of cancer.  If detected early, to 60% 85%  At what time during examined?  The day the meaning and the meaning an	the expecte 75% 87% the menstrenstrual fenstrual f	CIRCLE d cure r ual cycl	one ate of e should ns.	breast 80% 95% d the	cancer	is:	he
	In women, breast can forms of cancer.  If detected early, to 60% 85%  At what time during examined?  The day the meaning day day the meaning day day the meaning day	the expecte  75%  87%  the menstrual fenstrual	CIRCLE d cure r ual cycl low begin	one ate of e should ns.	breast 80% 95% d the	breasts	is:	
	In women, breast can forms of cancer.  If detected early, to 60%85%  At what time during examined? The day the modern of the following which of the following the f	the expecte  75%  87%  the menstrual fenstrual	CIRCLE d cure r ual cycl low begin	one ate of e should ns.	breast 80% 95% d the	breasts	is:	

## Breast Self-Examination Information

12.	The reason for looking at the breasts with the arms over the head and also with the hands squeezing the waist is:	U
	to see if your breasts had a size change since you last examined them.	
	to check for dimpling.	
	to check for discharge.	4
13.	Select the two significant signs to look for during the <u>visual</u> examination.	
	Discharge Tender areas	*
	Lumps Bleeding	
14.	Indicate where you would begin the "Feeling" part of the breast self-examination by circling the appropriate number.	
	12 phone plantement /mouttest	
	9 3	0
15.	In relation to the breast (in order to do a correct breast self-examination) the fingers should be:	
	slightly curved curved to use just the finger tips.	
	flat but apart flat and close together.	
16.	A second examination is done lying on your back to:	
	spread the breast tissue over the chest wall.	
	relax any tension you might have.	
	cause the lumps to be more visible.	

Breast Self-Examination Information 17. If a lump is found you should: watch it for a week or two to see if it goes away. call a doctor immediately. remain calm and remember that cancer is curable if detected and treated soon enough. 18. Breast self-examination should begin by examining yourself: sitting at a table. in a shower or bath. lying down. 19. When performing the prone examination, a small pillow or folded towel is placed: under the shoulder opposite the breast being examined. under the shoulder on the same side as the breast being examined. under both shoulders.

INCLOSURE 4

Formative Evaluation: Patient Version

alealunds dook asker

	FORMATIVE EVALUATION: PATIENT VERSION
1.	Date:
2.	Patient's Name:
3.	Age: materia all dals adducts gaived are ameined
4.	Social Security Number:
5.	Race or Ethnicity:
6.	Sex: "I make and mrotred of tool lies seign temporal
7.	Education, Completed:
8.	Occupation:
9.	Program Title:
0.	Evaluator:

Instructions: This form is to be filled out in a personal interview with the parient as the patient works the program. The interviewer should make a special effort to put the patient at ease and explain that we are testing the program, NOT THE PATIENT. The results of these tests will be kept private and will only be seen by those concerned with this project.

### OPERATIONAL DEFINITIONS:

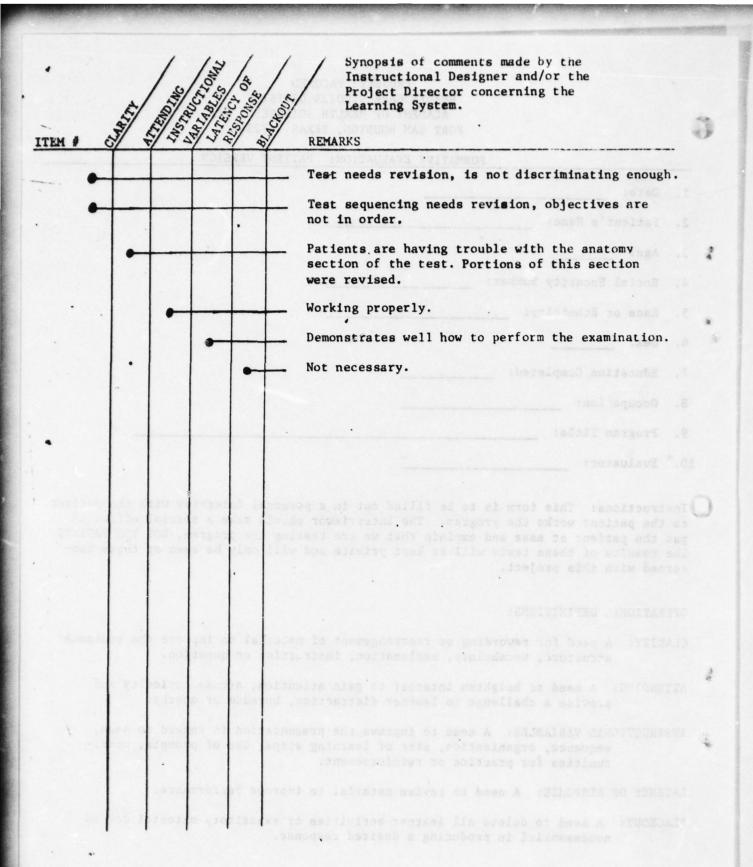
CLARITY: A need for rewording or rearrangement of material to improve the sentence structure, vocabulary, explanation, instruction or question.

ATTENDING: A need to heighten interest to gain attention, arouse curiosity and provide a challenge to learner distraction, boredom or apathy.

INSTRUCTIONAL VARIABLES: A need to improve the presentation in regard to pace, sequence, organization, size of learning steps, use of prompts, opportunities for practice or reinforcement.

LATENCY OF RESPONSE: A need to revise material to improve performance.

BLACKOUT: A need to delete all learner activities or expository material deemed nonessential in producing a desired response.



INCLOSURE 5

Physician Evaluation Form

PHYSICIAN/NURSE	CLINICIAN	EVALUATION	FORM

PHISICIAN/NURSE CLINICIAN EVALUATION FORM
SUBJECT Breast Come TITLE Proposition Evaluator De Comp
IS THE SUBJECT COVERED COMPLETELY?
WHAT WOULD YOU ADD? Light horigins and his special
WHAT WOULD YOU DELETE? Charify rype desection.

IS THE CONTEST ORGANIZED PROPERLY?

IF NOT, HOW WOULD YOU CHANGE THE SEQUENCE?

ARE ALL THE CRUCIAL OBJECTIVES WIFEARS ARE ARE AREAL THE CRUCIAL OBJECTIVES WIFEARS ARE ALL THE CRUCIAL OBJECTIVES WIFEARS AREAL TO GOVE AND LIVE EFFECTIVES WITH HIS DISEASE OR PROBLEM.)

IF NOT, PLEASE ELABORATE.

ARE FAMILIAR SYMBOLS AND CONCEPTS USED TO HELP EXPLAIN UNFAMILIAR SUBJECT MATTER?

ye

FOR WHAT PATIENT POPULATION WOULD YOU RECOMMEND THIS PRESENTATION?

Female

DO YOU FEEL THE PRESENTATION IS TOO LONG, TOO SHORT AND WHY?

Dr. Camp, felt that his remained where complete and that we then received

INCLOSURE 6

Final Staff Evaluation

### FINAL STAFF EVALUATION

SUBJECT: Breast Self-Examination	TITLE: Introduct	ion to B.S.E.
WORKING TIME: 30 Minutes	DATE PRODUCED: _	1975
FORMAT: Video tape	DATE EVALUATED:	20 Jan 76
PRODUCER: OMNI/PACOMED		
PRICE: See Cost Analysis (Appendix 9)	INTENDED AUDIENC	E: General (Adult/High School Ag
SYNOPSIS: Gives a discription of tissue will feel like a		
OBJECTIVES: Met basic requirement objectives.	ts of the learnin	g system behavioral
SPECIAL STRENGTHS AND WEAKNESSED: following materials to supplement	the learning syste	em: Privacy Act
Statement, Pre & Post-tests, Demographics Objectives.	raphic Data Form	and the Behavioral

### DEFINITION OF SELF-INSTRUCTIONAL FEATURES

PRE-TEST:	Questions or tasks at the beginning of the instructional
	system to measure subject entry level (prior knowledge)
	of material to be presented.

OBJECTIVES: Description of what the subject will be able to do upon completion of the learning system.

PRACTICE: Questions or tasks in the instructional system similar to criterion measures.

POST-TEST: Questions or tasks at the conclusion of the instructional system which prove the subject has learned the intended information.

FEEDBACK: Initial reactions to the instructional system by the patient (Interview Comments).

PLEASE TURN PAGE

ATTITUDE SCALES: Measures feelings, emotions, or attitudes toward the instructional strategy, it's contents and concepts.

Self-Instructiona Features		Version	2n	d Version	3r	d Version
Pre-test	0 of 1	5 passed.	0 of	9 passed	. 3 of	6 passed.
Objectives	See be	havioral O	bjectiv	es		
Practice	See In	structions	1 System	m		
Post-test	7 of 1	5 passed.	4 of	9 passed	. 6 of	6 passed.
Feedback	See Fo	rmative Ev	aluatio	n		
Attitude Scale	See Pr	ocess Eval	uation			
TECHNICAL ASPECTS	grunteries.			Set stard		
Sound:	Poor		X .	Excellent		
Photography:			X			

MATRIX FOR FIELD IMPLEMENTATION

TITLE: Breast Self-Examination

	RECOMMENDATIONS	Secure permission to use OMNI slides or produce new artwork using OMNI slides as a model.	Purchase the video-tape and use as it is now produced.
mat and	SCRIPI	Script was pre- pared by modifying the OMNI booklet on breast self-exam	N/A
SOUND	CANOCA	Record new Script sound track, was pre- pared by modifying the OMNI booklet on breast	N/A
PHOTOGRAPHY		OMNI slides are excellent. There are a number of original slides that can be used.	Excellent
COPYRIGHT		Permission to convert to video- tape would have to be secured from OMNI Corp.	N/A
PRODUCER		PACOMED/ OMNI Corp.	OMNI
TRACK		Breast Anatomy	Teaching B.S.E.

### APPENDIX 5

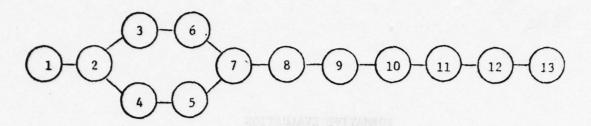
FORMATIVE EVALUATION

Family Planning

ACTION DANS

PRECEDING PAGE BLANK

## SUMMARY NETWORK OF INSTRUCTIONAL DESIGN FOR FAMILY PLANNING



#### EVENT IDENTIFICATION

- 1. Topic Selected: Family Planning.
- 2. Met with Content Consultant, p. 267.
- 3. Develop Behavioral Objectives, p. 267.
- 4. Conduct "Real World" Search for Existing Educational Software on Family Planning, p. 267.
  - 5. Evaluate Existing Educational Software, p. 267.
  - 6. Write Criterion Measures (Pre-test Post-test), p. Incl 3-c & j.
  - 7. Design Instructional System. (See Instructional System for Family Planning, p.267 Incl 3-a thru j.
  - Conduct Formative Evaluation, p.268 (See Formative Evaluation Form, Incl 4.
  - 9. Data Collection, p. 268.
- 10. Revisions, p. 270.
- 11. Conduct Physician Evaluation, p. 275 (See Physician Evaluation Form, Incl 5)
- 12. Cost Analysis, p. 275 and Table 5, p. 276.
- 13. Final Staff Evaluation, p.275& Incl 6, Final Staff Evaluation Form.

#### 1. INTRODUCTION.

a. The following is a chronological representation of the systems approach to instructional design after the topic selection was made. Each event, as it appears in the Summary Network of the Instructional Design (p. 266), will be discussed in detail (Refer to corresponding numbers in the summary.) to give the proper perspective of the total developmental process.

## (2) Initial Contact With the Content Consultant.

(a) In January 1976, the Instructional Designer met with the Content Consultant to outline the behavioral objectives for the instructional learning system on Family Planning.

## (3) Behavioral Objectives.

(a) The Family Planning behavioral objectives are statements of tasks that the patient will be able to perform upon successful completion of the learning system. See Inclosure 1, page 277, for a list of these objectives.

## (4) "Real World" Search.

(a) There was a large variety of educational software available that dealt with Family Planning. Five programs were selected that met the behavioral objectives' requirements.

## (5) Existing Educational Software Evaluation.

(a) Evaluation of the existing educational software was conducted and documented on the Initial Staff Evaluation Forms attached at Inclosure 2, a-e. As a result, five filmstrips were selected for incorporation into the Family Planning Instructional System. These filmstrips met the behavioral objective requirements stated in Inclosure 1, Behavioral Objectives.

## (6) Criterion Measures.

(a) The criterion measures were written to determine the subject's entry level, (pre-test score), insure that the instruction taught the objectives (tasks the patient must master), and that the instructional system was effective (minimum of 80 percent competency level). See Inclosure 3.

## (7) Family Planning Instructional System.

(a) The following is a list of the forms necessary to administer the instructional strategy for Family Planning. These forms represent the paperwork actually encountered by each patient when s/he was given the learning system. Each form, including the learning tracks, falls in the proper order of sequence. See Inclosure 3, a-j.

a) Privacy Act Statement

b) Demographic Data: Family Planning

c) Family Planning Information (Pre-test)

d) Family Planning Objectives

e) Educational Intervention: Family Planning

f) Educational Intervention: Vasectomy

- g) Educational Intervention: Intra Uterine Device
- h) Educational Intervention: The Pill 21 Day Version
- i) Educational Intervention: The Pill 28 Day Version
- j) Family Planning Information (Post-test)

### (8) Formative Evaluation.

- (a) During the formative evaluation stage of Family Planning, the system was tested on a combination of subjects from the nursing staff, non-professional MEDDAC personnel, and patients from the Family Practice Clinic. The Project Director and/or the Instructional Designer was present for each instructional session to evaluate the subject's reaction to the learning system. If the subject encountered learning problems during the presentation of the learning strategy, the difficulties were noted on the Formative Evaluation: Patient Version Form (See Inclosure 4) so that the necessary revisions could be made.
- (b) At the conclusion of the learning session, each subject was interviewed to obtain comments concerning his/her personal feelings about the program. Information is provided as follows:
  - What were the most difficult parts of the lesson? No comments were obtained on this question. All subjects said that the instruction was extremely good.
  - What was the best feature of the instruction?
    "I enjoyed the T.V. tapes."
    "Instruction was really complete."
    "Variety of methods presented."
  - 3 What was the worst feature of the lesson?
    No comments were obtained on this question.
- (9) <u>Data Collection</u>.

  The following is a compilation of demographic, test (prepost), and process evaluation data.

#### (a) Demographic Data.

1 A total of 30 individuals were used as subjects during the formative evaluation stage of Family Planning. These subjects were comprised of a cross section of nursing staff, non-professional MEDDAC personnel, and patients from the Family Practice Clinic.

- 2 <u>Source Breakdown</u>: There were 17 patients from the Family Practice Clinic, five nursing service personnel, and eight non-professional MEDDAC personnel used as subjects.
- 3 Sex Breakdown: This evaluation was comprised of the following: 23 female subjects and 7 male subjects.
- $\frac{4}{\text{year}}$  Age Breakdown: Twenty-one subjects were in the 15-25 year age group, six from 26-35 years of age, and three from 36-45 years of age.
- 5 Occupation Breakdown: The occupation data is as follows: One housewife, 10 students, 11 administrative personnel, and 8 MEDDAC non-professional personnel.
- 6 Marital Status: The marital status information is provided as follows: 14 married subjects, one widow, 13 single subjects, one engaged subject, and one divorced subject.
- 7 Educational Level Data: Fourteen subjects had a high school education, 10 subjects had attended 1-3 years of college, four subjects had obtained a Baccalaureate Degree, and two subjects had obtained a Master's Degree.
  - (b) Pre and Post-test Data Collection.
- $\underline{1}$  There were 51 possible correct responses to the Family Planning Information Pre and Post-tests. The results are as follows:
- <u>a</u> Pre-test Score Range: Of the 30 participants, the highest number of correct responses was 43 and the lowest number of correct responses was 21.
- $\underline{b}$  Post-test Score Range: Fifty was the highest number of correct responses and 22 was the lowest number of correct responses.
- <u>c</u> Total Scores -- Pre-test: 1,035 correct responses out of 1,531 possible points = 68 percent, the average percentage correct.
- $\underline{d}$  Total Scores -- Post-test: 1,315 correct responses out of 1,531 possible points = 86 percent, the average percentage correct.

(The average percentage scores were derived by dividing the total number of correct responses of the 30 subjects by the total possible points.)

### (c) Correct Response Analysis.

1 The pre and post-tests were evaluated to determine areas to be strengthened or revised. Each subject's test responses were listed according to the corresponding behavioral objective and criterion measure. See Tables 1 and 2, pages 271-272, for the Correct Response Analysis - Pre-test and Post-test.

#### (d) Process Evaluation.

1 The process evaluation measured the opinions toward the instructional strategy. The results are as follows: As a result of this learing experience, 23 subjects thought they had misconceptions about Family Planning. Seven felt they had no misconceptions. Twenty-eight subjects thought the learning experience clarified these misconceptions. Two subjects indicated that the misconceptions were only "somewhat" clarified. See Table 3, page 273, for the Tabulation of Process Evaluation Responses.

2 Seven subject areas were listed in the Comment Section of the Process Evaluation Form for Family Planning. A synopsis of the comments obtained in this section are provided as follows:

- a Physical Setting: "Excellent" "Good"
- b Health Educator: "Informative"
- c Audio-Visual Equipment: "Very Good"
- d Patient Education Programs: "Excellent"
- e Paperwork: "Self-testing is great"
- f Patient Learning Concept: No comment was made

on this subject.

g Other: No comment was made on this subject.

(The majority of the subjects' comments were, "excellent, good, and informative" or no comment at all.)

#### (10) Revisions.

(a) The first, second, and third version results of Family Planning Information Pre and Post-test results are shown on the Total Pre and Post-test Scores, Table 4, page 274. The revisions brought the third version test scores up to the 80 percent level for 100 percent of the test population.

1 Rationale for the Revision on the Pre and Post-tests.

a The percentage of negative comments about the choice of words in the pre and post-tests necessitated minor revisions to clarify the meaning of the questions for the patients.

FAMILY PLANNING INFORMATION CORRECT RESPONSE ANALYSIS - PRE-TEST

TABLE 1

BEHAVIORAL OBJECTIVES	CRITERION MEASURES		NUMBER OF INCORRECT
	(Incl 3-c)	RESPONSE ANALYSIS	RESPONSES *
1	1	-+++-+++	00
		++++-++-+++++++++++	1
		++++++	(1)
2	2	+++++++++++++++++++++++++++++++++++++++	2
3	3	+++++++++++++++++++++++	7
4	4	++++++++++++++-+++	9
		+++++++++++++++++++++++++++++++++++++++	0
		++++-+-+-+-+-+-+-++	(13)
		+++++++	
5	5	++++++++++++++++++++++++++	5
		+++++++++++++++++++++++++++++++++++++++	6
		+++++++++++	0
		++++++++++++++++++++++++++++++++++++	(D)
6	6	+++++++++++++++++++++	7
7	7	+++++++++++++++++++++++++++++++++++++++	0
8	8	++-++-+++++++++++++++++++++++++++++++++	6
9	9	-++++++++++++++++++++++++++++++++++++++	7
10	10	++-++++++++++++++++	9
11	11	-+++-+++++++++++++++++++++	3
12	12	+++++++++++++++++++++++++++++++++++++++	3
		-++++++++++++++++++++++++++++	4
13	13	++++	8
		+++++++++++++++++++++++++++	3
14	14	+++++++++++++++++++++++++++++++++++++++	3
15	15	+-++++++	8
16	16	-++++++++++++++++++++++++++++++++++++++	5
17	17	+++++++++++++++++++++++++++++++++++++++	0
18	18	+-+++++++++++++++++++	6
		+-++++-++++++++++++	7
19	19	+-+++++++++++++++++++++++++++	2
		+++++++++++++++++++++++++++++++++++++++	3
		++++-++++++++++++++++++++++++++++++++++	3
20	20	+++++++++++++++++++++++++++++++++++++++	4
21	21	+-+++++++++++++++++	6
		+++++++++++++++++++++	5
22	22	+++++++++++++++	6
	23	+++++++++++++	6
23	24	+++++++++++++++++++++++++++++++++++++++	5
24	25	+++++++++++++++++++++++++++++++++++++++	3
25	26	+++++++++++++++++++++++++++++++++++++++	4
26	27	-++++++++++++++++++++++++++++++++++++++	7
27	28	+++++++++++++++++++++++++++++++++++++++	5
28	20	+-+++++++++++++++++++++++++++++++++++++	1
29		+++++++++++++++++++	8
30	29	++-++++++++++++++++++++++++++++++++++++	4
30	27	+++++++	5
		+-+++++++++++++++++++++++++++++++++++++	3
31	30	+++++++++++++++++++++++++++++++++++++++	1
32	30	++++++++++++	(10)
33		+++++++	00
34		++++	15
34		TT	

<sup>- =</sup> INCORRECT RESPONSE

<sup>+ =</sup> CORRECT RESPONSE

O - CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

<sup>\*</sup>RESULTS TABULATED ON THE PRE-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

TABLE 2

FASHIY PLANTANG INFORMATION CORRECT RESPONSE ANALYSIS - POST-TEST

	MI ASURES		NUMBER O
	(Incl 3-		RESPONSE
1	1		3
1	2		1
1	3		2
		+ + + + + + + + + + + + + + + + + + + +	0
4		++-+-++++++++++++++++++++++++++++++++++	3
		+++-++++++++++++++++++++++++++++++++	4
4	4	+ + + + + + + + + + + + + + + + + + + +	0
6	5	++-+++++++-++++++++++++++++	5
7	6	+ - + + + + - +	6
8	7	+ + + + + + + + + + + + + + + + + +	2
9	8	++-++++++++++++++++++++++++++++++++++++	1
10	9	+++++++++++++++++++++++++	4
11	10	++-++++++++++++++++++++++++++++++++++++	6
	10	+ + + + - + + + + + + + + + + + + + + +	1
12	11	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5
13	12	+++++++++++++++++++++++++++++++++++++++	4
11	12	* * * * * * * * * * * * * * * * * * * *	
		AND THE RESIDENCE OF THE PROPERTY OF THE PROPE	
14		THE RESIDENCE AND ADDRESS OF THE PARTY OF TH	1
15	13	THE RESERVE OF THE PARTY OF THE	The Market Control of the Control of
		+ 1 + + 1 + 1 + + + + + + + + + + + + +	1
		111111111111111111111111111111111	4
16	14	1 4 4 4 4 4 4 4 - 4 4 1 4 4 4 4 4 4 4 4	3
17	15	+++++++++++++++++++++++++++++++++++++++	5
18	16	+++-++-++ +++++++++++++++++++++++++++++	]
19	17	+++++++++-+++++++++++++++++++++++++++++	4
20	18	+++++++++++++++++++++++++++++++++++++++	0
21	19	+++++++++++++++++++++++++++++++++++++++	2
22	20	++++-++++++++++++++++++++++++++++++++++	4
		++++	3
23	21	+++++++++++++++++++++++++++++++++++++++	0
24	22	+++++++++++++++++++++++++++++++++++++++	0
25	23	+++++++++++++++++++++++++++++++++++++++	1
26	24	+++++++++++++++++++++++++++++++++++++++	0
27	25	* * * * * * * * * * * * * * * * * * * *	Ō
28	26	+++++++++++++++++++++++++++++++++++++++	3
29	27	+++++-+++++++++++++++++++++++++++++++++	2
30	28	+++-+++++++++++++++++++++++++++++++++++	2
	-0	+++++++++++++++++++++++++++++++++++++++	3
31	29	+++++++++++++++++++++++++++++++++++++++	0
,,	47	+++++++++++++++++++++++++++++++++++++++	0
		+++++++++++++++++++++++++++++++++++++++	2
32		+++++-+	8
36		The state of the s	- 3
		MARKET THE PROPERTY OF THE PRO	
		The first and the second secon	And the Party of t
	2.0	++-++++++++++++++++++++++++++++++++++++	2
1.1	30	+++++++++++++++++++++++++++++++++++++++	2
		* * * * * * * * * * * * * * * * * * * *	0
		+++++++++++++++++++++++++++++++++++++++	3
		+++++-+++++++++++++++++++++++++++++++	7
		+++++++++++++++++++++++++++++++++++++++	0
		* * * * * * * * * * * * * * * * * * * *	4

- \* INCORRECT RESPONSES
- + = CORRECT RESPONSES
- - CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

AMERICAN ON THE POST-TEST INDICATED THAT THERE WAS NO FURTHER NEED FOR REVISION.

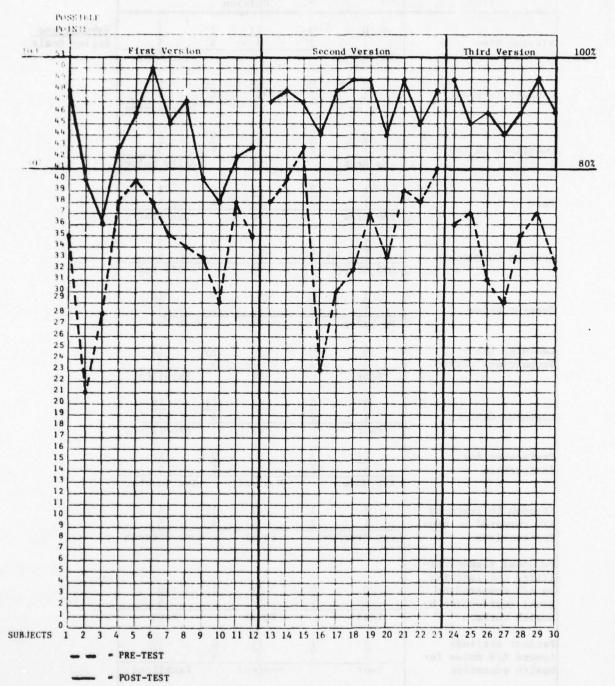
TABLE 3
TABULATION OF PROCESS EVALUATION RESPONSES FAMILY PLANNING

Item	Opinion				
	0	$\frac{0}{2}$	$\frac{27}{3}$	2/4	1
Viewing Time	Too Short	2	OK	4	Too Long
		•	1,	10	,
Content Interest	1	$\frac{0}{2}$	$\frac{14}{3}$	$\frac{10}{4}$	5
	Boring	Boring		Fascinating	
Questions on Topic	0	$\frac{2}{2}$	$\frac{13}{3}$	94	6
	1	2	3 0K		5
	No Help	No Help		Really Helped	
	1 1	$\frac{3}{2}$	25 3	0 .	1 =
Pace	Too Slow		OK	4	Too Fast
	114		17	0	,
Content Uniqueness	1	$\frac{1}{2}$	$\frac{17}{3}$	94	5
Content uniqueness	Old Stuff		OK	17	All New
	1	1	9	9	10
Content Value	1	$\frac{1}{2}$	9 3 OK	4	5
	No Value	No Value		Most Val	
Learning Lab Technicians' Style	<u>o</u>	0 2	9 3	10	11
	Poor	2	OK	4	5 Excellent
Learning Center					
	$\frac{0}{1}$	$\frac{0}{2}$	$\frac{4}{3}$	11	15
	Poor		OK	Excellent	
Preference for	17	3	7	2	1
Instruction	1	$\frac{3}{2}$	3	2/4	5
	A/V Mode		Neutral	Live Teacher	
Freedom to learn by	1	1	12	12	4
A/V compared to usual	1	2	3 Equal	4	5
instructions	Less Freedo	Less Freedom Ed		Мо	re Freedom
Personal responsibi-					
lities for learning by A/V compared to	0	0	19	11	0
usual instruction by,	$\frac{0}{1}$	2	3	11/4	5
health workers	Less		Equa1		More
Patient attitude	0 1	1	11	8 4	10
toward A/V modes for		$\frac{1}{2}$	3		5
health education	Poor		Neutral		Excellent
Patient viewing of	5	$\frac{6}{2}$	12	44	3
commercial TV in hours during the day	Less Than	2	Hours		More Than
nous during the day	Debo that				

Tabulations Rating Scale

TABLE 4

FAMILY PLANNING
TOTAL PRE AND POST-TEST SCORES



## (11) Physician Evaluation.

(a) Upon completion of the revisions in the learning strategy, the Content Consultant (physician) reviewed the entire program and evaluated the content for the target population. See Inclosure 5, Physician Evaluation Form.

## (12) Cost Analysis.

(a) The following (See Table 5, page 276) is an analysis of the costs inherent in developing a learning system for Family Planning. The costs are listed in three separate categories; 1) hardware (equipment), 2) software (educational materials), and 3) administrative (salaries, reproduction costs, etc.). For further cost information, see Appendix 9, pages 474-476, Current Baseline Information and Cost Analysis.

### (13) Final Staff Evaluation.

(a) Upon completion of the formative stage of the evaluation, the learning system was evaluated as a total package. See Inclosure 6, Final Staff Evaluation Form.

TABLE 5
FAMILY PLANNING COST ANALYSIS

HARDWARE	DEVELOPMENTAL AND INVESTMENT COSTS (Price per Unit)	RECURRENT COST PER HCUR	
SONY: Video Tape Recorder TV Monitor	Price per unit no longer needs to be added. Initial investment costs was anno- tated under hypertension.	\$0.15 .08	
Headphones	e gninassi s molegiavab si b	.002	
Listening Center	For each piece of equip- ment = 1¢/Unit Hour	.002	
SUB-TOTAL	-0-	\$0.27	
SOFTWARE	Coom completion of the format		
PACOMED Script (Advanced Organizer)	-0-	\$0.03	
MEDFACT + PACOMED Family Planning	\$90.00	.02	
MEDFACT + PACOMED I.U.D.	90.00	.02	
MEDFACT + PACOMED The Pill (21 Day)	75.00	.01	
MEDFACT + PACOMED The Pill (28 Day)	75.00	.01	
MEDFACT + PACOMED Vasectomy	85.00	.01	
MEDFACT + PACOMED The Rhythm Method	90.00	.02	
SUB-TOTAL	\$505.00	\$0.12	
TOTAL		\$0.39	
ADMINISTRATIVE COSTS			
Developmental	\$373.00		
Typing & Reproduction	132.00		
Paperwork to Individualize Strategy		\$0.08	
SUB-TOTAL	\$505,00	\$0.08	
TOTAL	\$1,010.00	\$0,47	

### INCLOSURE 1

Family Planning Objectives

#### FAMILY PLANNING OBJECTIVES:

Upon completion of this learning package the patient will be able to:

- 1. Identify the female reproductive organs.
- 2. Identify the male reproductive organs.
- 3. Tell how often the menstrual cycle occurs.
- 4. Describe the function of the menstrual cycle.
- 5. Describe the function of: The Ovaries, Uterus, Fallopian Tubes, and Ovulation.
- 6. List the two main stages of the menstrual cycle. Example: Menstruation and Ovulation.
- 7. Tell what happens when a sperm and an egg unite.
- 8. Explain the "Risk" period in the menstrual cycle.
- 9. Tell what the average life span is of a sperm and an egg.
- 10. Explain where fertilization occurs.
- 11. List the function of the Condom.
- 12. List the advantages of the Condom.
- 13. List the disadvantages of the Condom.
- 14. List the function of the Diaphragm.
- 15. List the advantages of the Diaphragm.
- 16. List the disadvantages of the Diaphragm.
- 17. Describe the use of the Intra Uterine Device (IUD).
- 18/ Tell what the advantages are of using the IUD.
- 19. Explain the disadvantages of using the IUD.

## Family Planning Objectives Cont'd

- 20. Explain who can have a Vasectomy.
- 21. Define what a Vasectomy is.
- 22. Describe the advantages of a Vasectomy.
- 23. Explain the disadvantages of a Vasectomy.
- 24. Explain the function of the Rhythm Method of birth control.
- 25. List the advantages of the Rhythm Method.
- 26. List the disadvantages of the Rhythm Method.
- 27. Define Oral Contraceptives.
- 28. Explain the function of the Oral Contraceptive.
- 29. Explain how the "Pill" is used.
- 30. Tell why the pills must be stopped after 21 consecutive days.
- 31. List the advantages of the "Pill".
- 32. List the disadvantages of the "Pill".
- 33. List some of the dangers of Venereal Disease.
- 34. List the two most common types of Venereal Disease.

## INCLOSURE 2

Initial Staff Evaluation Forms

## INITIAL STAFF EVALUATION FORM

SUBJECT Family Planning	TITLE Overview of Family Planning		
WORKING TIME 15 Minutes	DATE PRODUCED 1974		
FORMAT Filmstrip	DATE EVALUATED June 1975		
PRODUCER MedFact	PURCHASE/RENTAL SOURCE Same		
PRICE \$65.00  AVAILABILITY: CONTRACT PRODUCER OR COOR SYNOPSIS Introduces all the different	RDINATOR DIRECTLY.  types of birth control available.		
INTENDED AUDIENCE Adult OBJECTIVES Conception/Contraception/Men Diaphragm/Pill and Rhythm Met	nstrual Cycle/Introduction of the IUD/Condom/		
PHOTOGRAPHY: POOR FAIR GOOD  SPECIAL STRENGTHS AND/OR WEAKNESSES Fi	X EXCELLENT  X EXCELLENT  Ilmstrip needs supplemental forms in order to any are: Privacy Act Statement. Pre & Postes.		
COULD THIS FORMAT WORK EFFECTIVELY BY IT EXPLAIN: Not without the above mention			
	BE USED AS A SUPPLEMENT TO OTHER INSTRUCTION NO X		
POSITION: _INSTRUCTIONAL DESIGNER			
AHS FORM 15 (PACOMED)	281		

### INITIAL STAFF EVALUATION FORM

SUBJECT Family Planning	TITLE The Rhythm Method			
NORKING TIME 10 Minutes	DATE PRODUCED 1974			
FORMAT Filmstrip	DATE EVALUATED June 1975			
PRODUCER MedFact Inc.				
PRICE \$65.00  AVAILABILITY: CONTRACT PRODUCER OR COOR SYNOPSIS Explained how the Rhythm Met it's use.	RDINATOR DIRECTLY.  Thod functions and the risks involved with			
INTENDED AUDIENCE <u>Adult</u> OBJECTIVES <u>Menstrual Cycle/Conception</u> cycle/ The safe period/Abdominal pain/V  MET BASIC BEHAVIORAL OBJECTIVES	n/Ovulation/Precautions to be taken during the Vaginal discharge/Temperature rise.			
TECHNICAL ASPECTS:  SOUND: POOR FAIR GOOD PHOTOGRAPHY: POOR FAIR GOOD SPECIAL STRENGTHS AND/OR WEAKNESSES No The forms needed are: Privacy Act State objectives.	X EXCELLENT  X EXCELLENT  eeds supplemental forms to work effectively.  ement. Pre & Post-tests, and written behavioral			
COULD THIS FORMAT WORK EFFECTIVELY BY ITEXPLAIN: Not without the above mention				
	T BE USED AS A SUPPLEMENT TO OTHER INSTRUCTIONSNO ily Planning.			
POSITION: INSTRUCTIONAL DESIGNER				

AHS FORM 15 (PACOMED) 25 Mar 1975

INITIAL STAFF EVALUATION FORM SUBJECT Family Planning TITLE Vasectomy 10 Minutes WORKING TIME DATE PRODUCED 1974 June 1975 FORMAT Filmstrip DATE EVALUATED PRODUCER MedFact Inc. PURCHASE/RENTAL SOURCE Same PRICE \$65.00 AVAILABILITY: CONTRACT PRODUCER OR COORDINATOR DIRECTLY. SYNOPSIS Discusses the operation and the results of a Vasectomy. Points out that there is no sex drive change after the operation. INTENDED AUDIENCE Adult OBJECTIVES Results are permanent/Testicles/Vas Deferens/Sperm/Sperm may remain active for two or three months after the Vasectomy. MET BASIC BEHAVIORAL OBJECTIVES TECHNICAL ASPECTS: SOUND: POOR FAIR GOOD X EXCELLENT PHOTOGRAPHY: POOR FAIR GOOD X EXCELLENT PECIAL STRENGTHS AND/OR WEAKNESSES Needs supplemental forms to work effectively in a total learning system. The forms needed are: Privacy Act Statement, Pre & Post-tests and behavioral objectives. COULD THIS FORMAT WORK EFFECTIVELY BY ITSELF? EXPLAIN: Not without the above mentioned forms. COULD THIS SUBJECT/FORMAT (PACKAGE) BEST BE USED AS A SUPPLEMENT TO OTHER INSTRUCTION? YES X NO EXPLAIN: Part of total package on Family Planning.

POSITION: INSTRUCTIONAL DESIGNER

AHS FORM 15 (PACOMED) 25 Mar 1975

### INITIAL STAFF EVALUATION FORM

SUBJECT Family Planning	TITLE IUD
WORKING TIME 5 Minutes	DATE PRODUCED 1974
FORMAT Filmstrip	DATE EVALUATED June 1975
PRODUCER MedFact Inc.	PURCHASE/RENTAL SOURCE Same
PRICE \$65.00	
AVAILABILITY: CONTRACT PRODUCER OR COORDIN	MATOR DIRECTLY.
SYNOPSIS Discusses placement, use and ris	k factors involved with the use of
the IUD.	
INTENDED AUDIENCE Adult	
	work for two or three months after
placement.	
MET THE BASIC B	EHAVIORAL OBJECTIVES
TECHNICAL ASPECTS:	
	EXCELLENT
PHOTOGRAPHY: POOR FAIR GOOD X	
SPECIAL STRENGTHS AND/OR WEAKNESSES Needs	s supplemental paperwork (forms) to be
effective. The forms needed are: Privacy A	Act Statement, Pre & Post-tests, and
behavioral objectives.	
COULD THIS FORMAT WORK EFFECTIVELY BY 1TSEL	F? NO
EXPLAIN: Not without the necessary forms.	
COULD THIS SUBJECT/FORMAT (PACKAGE) BEST BE	USED AS A SUPPLEMENT TO OTHER INSTRUCTION
YES X N	10
EXPLAIN: Part of the total section on Fami	ily Planning.

AHS FORM 15 (PACOMED) 25 Mar 1975

### INITIAL STAFF EVALUATION FORM .

SUBJECT Family Planning	TITLEOral Contraception
WORKING TIME 15 Minutes	DATE PRODUCED 1974
FORMAT Filmstrip	DATE EVALUATED July 1975
PRODUCER MedFact Inc.	PURCHASE/RENTAL SOURCE Same
PRICE \$65.00	
AVAILABILITY: CONTRACT PRODUCER OR COOR	
SYNOPSIS Discusses the use, advantages "Pill".	and known disadvantages of the use of the
FIII .	
INTENDED AUDIENCEAdult	
OBJECTIVES Birth Control/Regulates mens	strual cycle/Must be taken daily for at least
21 days/Nausea, spotting, and tender bro	easts may accompany the use of the pill.
MET BACIC BEIL	AUTORAL OR LIMITURG
MET BASIC BEH	AVIORAL OBJECTIVES.
TECHNICAL ASPECTS:	
SOUND: POOR FAIR GOOD	X EXCELLENT
PHOTOGRAPHY: POOR FAIR GOOD	X EXCELLENT
SPECIAL STRENGTHS AND/OR WEAKNESSES Ne	
The forms needed are as follows: Privacy	Act Statement, Pre & Post-tests and the
behavioral objectives.	Act beatement, The direct lests and the
COULD THIS FORMAT WORK EFFECTIVELY BY IT	
EXPLAIN: Not without the supplemental	paperwork.
COULD THIS SUBJECT/FORMAT (PACKAGE) BEST	BE USED AS A SUPPLEMENT TO OTHER INSTRUCTION?
YES Y	
EXPLAIN: Part of the total package for	Family Planning.
POSITION: INSTRUCTIONAL DESIGNER	

AHS FORM 15 (PACOMED) 25 Mar 1975

ACADEMY OF HEALTH SCIENCES (ARMY) FORT SAM HOUSTON TX--ETC F/G 6/5 STRATEGY FOR INSTRUCTIONAL SYSTEMS DESIGN AND FORMATIVE EVALUAT--ETC(U) JUL 76 D H KUCHA AD-A070 921 UNCLASSIFIED HCSD-79-001-B NL 4 OF-7 AD 70921 6170

#### INCLOSURE 3

Family Planning Instructional System Forms a - j

## PRIVACY ACT STATEMENT (5USC 552a)

1. Authority for collection of information including Social Security Number:

Section 3012, Title 10, US Code.

2. Principal purposes for which information is intended to be used:
To assist medical research personnel in the monitoring of individual patient performance and in evaluation of the PACOMED concept.
The last four digits of the SSN identifies the patient and allows
for computer consolidation, comparison, and retrieval of individual
data, and cross reference with the outpatient record if required.

3. Routine uses:

This information may be used in research pertaining to the planning and development of a prototype patient and community health staff education module; in the establishment of an objective and behavioral data bank; and in the development of appropriate medical instructional systems. Individual data may be used in analysis and discussion with other AMEDD personnel and consolidated in research reports for general release. No information that identifies any individual patient or physician will be released.

- 4. Providing of this information is voluntary but failure to provide will result in your exclusion from the research project.
- 5. The following forms are currently in use with this statement:

AHS Form 153 Demographic Data: Family Planning

Pre Test Family Planning Information
Post Test Family Planning Information

AHS Form 154 Demographic, Baseline Data, & Test Scores: Family Planning

AHS Form 154a Process Evaluation: Family Planning

AHS Form 154b Three Month Follow-Up Data: Family Planning

Scale Rotter's I.E. Scale
Scale Nelson-Denny Scale

Demographic Data: Family Planning

INSTRUCTIONS: Please answer each item by supplying the correct formation. If you have any questions, do not hes to ask the health educator.		
TELEPHONE NUMBERS: Home  1. Last four digits of sponsor's  2. Date:	(City) (State) (Zip)  Work  SSN	
4. Sponsor's Rank/Status  5. Sex:  6. Age last birthday:	Service Member or Dependent	
8. Marital Status:  Married:	Single: Divorced: Engaged: Separated:  1-3 Yrs College Baccalaureate Degree Master's Degree Doctor's Degree	
O. Religious Preference:		
1. Number of Children:		

	Pre-test
INSTRUCTIONS:	Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answers that statement. Mark an "X" on the line or lines in front of your answer(s).
EXAMPLE:	Boston is the capital of:
	Connecticut X Massachusetts Vermont
1. The functi	on of the menstrual cycle is to:
shed	the lining of the uterus.
clean	the fallopian tubes.
produ	ce new eggs.
2. The menstr	ual cycle occurs about every:
25 da	ys, 28 days, 30 days, or 31 days.
3. Match the	correct work (letter) with the proper definition.
A) Ovaries B) Ovulati	
C) Uterus D) Fallopia	Where the egg is fertilized.
b) railopi	Occurs on about day 15 of the menstrual cycle
	Where the baby is formed after the egg is fertilized.
Movement of called:	f the egg from the ovaries to the fallopian tubes is
5. Removal of	the unfertilized egg from the uterus is called:
	and a personal result of the same and the sa



6.	A disadvantage of the IUD is:
	if inserted improperly, the body can reject it.
	it can cause the woman considerable pain once a month.
	it cannot be checked without seeing a doctor.
7.	Vasectomy is an operation performed on the sex glands of a:
	Man Woman
8.	An advantage of a vasectomy is that:
	it is a simple operation with no change in sexual desire.
	either partner can have the operation.
	it is not permanent.
9.	A disadvantage of a vasectomy is that:
	it is a complicated operation.
	it is permanent and cannot be "fixed".
	it requires a short stay in the hospital.
0.	The two most common types of venereal disease are:
	Gonorrhea Vaginitis
	Herpes Simplex Syphilis
1.	The diaphragm is a rubber disk place in the fallopian tube, uterus, or (Circle one)
	vagina to prevent fertilization.
2.	The dangers of venereal disease are:
	that they are infectious.
	that they may cause mental illness.
	the possible infection of an unborn child causing congenital



13.	The advantage of the diaphragm is that it is:
	easy to use during spontaneous sexual relations.
	quickly placed during intercourse.
	extremely effective.
14.	The disadvantages of the diaphragm are:
	the need for devices and medicines.
	not effective.
	that it will not work without the medications.
15.	The rhythm method of birth control is:
	a method of movement during sexual intercourse.
	abstinence from sexual intercourse during ovulation.
	withdrawal from the vagina before sperm can be deposited.
16.	The advantage of the rhythm method is:
	that no medicines/devices are needed.
	that it is extremely reliable.
	that you know exactly when pregnancy can occur.
17.	The disadvantage of the rhythm method of birth control is:
	that it is costly to keep all the records needed to be effective.
	that it is to time consuming to insert the needed devices.
	that it is not reliable.
18.	The IUD works by:
	preventing the egg from being fertilized.
	preventing the fertilized egg from leaving the fallopian tubes.
	preventing the fertilized egg from attaching itself to the



19.	The advantage of the IUD is:
	that it can be inserted at home, prior to intercourse.
	that it can be left in place for long periods of time.
	that it doesn't need to be checked, except once a year.
20.	When the sperm and the egg unite:
	conception occurs contraception has been successful.
	pregnancy begins.
21.	Pregnancy can occur during the menstrual cycle:
	immediately after the menstrual flow ends.
	during the menstrual flow.
	during ovulation.
	48 hours after ovulation.
22.	The "risk" period or time when conception can take place is:
	during ovulation. 72 hrs after ovulation.
	72 hrs before ovulation.
23.	The average life span of the sperm is:
	24 hrs, 48 hrs, or 72 hrs.
24.	The average life span of an egg is:
	24 hrs, 32 hrs, 48 hrs, or 72 hrs.
25.	Fertilization takes place in the:
	Vagina Uterus Fallopian tubes.
26.	There are two different types of oral contraceptives (the pill). They are listed as to the days they are used. What are the two types?
	20 day, 21 day, 24 day, 25 day, 28 day.



27. If a birth control pill is missed:

\_\_\_ start a new set of pills right away.

\_\_\_ take two the next day.

\_\_\_\_ use some other form of birth control until the next menstrual period is finished.

28. The advantages of the birth control pills are that they:

\_\_\_ are easy to use. \_\_\_ free of side effects.

\_\_\_\_ reliable. \_\_\_\_ safe for all women.

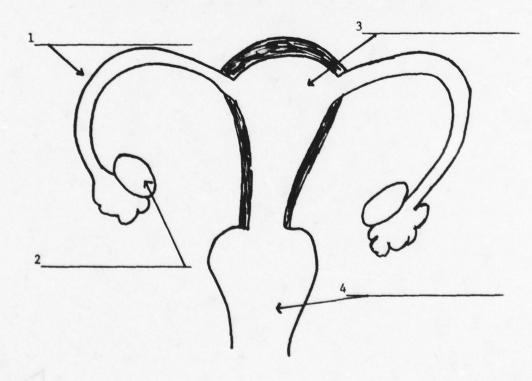
29. The disadvantages of the pill are that they:

\_\_\_ are not reliable. \_\_\_ cause a weight gain.

may cause cancer. \_\_\_\_ are expensive.

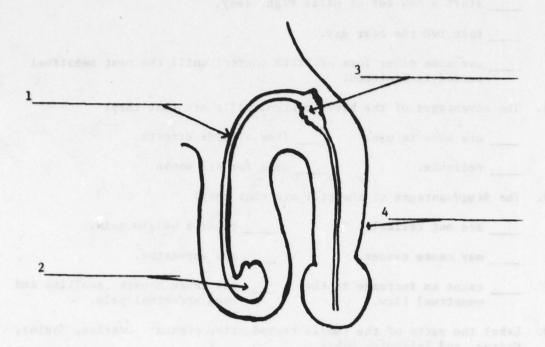
\_\_\_\_ cause an increase in the \_\_\_\_ may cause nausea, swelling and menstrual flow. \_\_\_\_ some abdominal pain.

30. Label the parts of the female reproductive organs: Ovaries, Vagina, Uterus, and Fallopian tubes.





31. Label the parts of the male reproductive system: Testicles, Seminal Vesicles, Vas Deferens, & Penis.



### FAMILY PLANNING OBJECTIVES:

Upon completion of this learning package the patient will be able to:

- . Identify the female reproductive organs.
- . Identify the male reproductive organs.
- . Tell how often the menstrual cycle occurs.
- . Describe the function of the menstrual cycle.
- . Describe the function of: The Ovaries, Uterus, Fallopian Tubes, and Ovulation.
- List the two main stages of the menstrual cycle. Example: Menstruation and Ovulation.
- . Tell what happens when a sperm and an egg unite.
- . Explain the "Risk" period in the menstrual cycle.
- . Tell what the average life span is of a sperm and an egg.
- . Explain where fertilization occurs.
- . List the function of the Condom.
- . List the advantages of the Condom.
- List the disadvantages of the Condom.
- . List the function of the Diaphragm.
- . List the advantages of the Diaphragm.
- . List the disadvantages of the Diaphragm.
- . Describe the use of the Intra Uterine Device (IUD).
- ! Tell what the advantages are of using the IUD.
- . Explain the disadvantages of using the IUD.

## Family Planning Objectives Cont'd

- . Explain who can have a Vasectomy.
- . Define what a Vasectomy is.
- . Describe the advantages of a Vasectomy.
- . Explain the disadvantages of a Vasectomy.
- . Explain the function of the Rhythm Method of birth control.
- . List the advantages of the Rhythm Method.
- . List the disadvantages of the Rhythm Method.
- . Define Oral Contraceptives.
- . Explain the function of the Oral Contraceptive.
- . Explain how the "Pill" is used.
- . Tell why the pills must be stopped after 21 consecutive days.
- . List the advantages of the "Pill".
- . List the disadvantages of the "Pill".
- . List some of the dangers of Venereal Disease.
- . List the two most common types of Venereal Disease.

#### Educational Intervention

3-e - Family Planning

3-f - Vasectomy

3-g - Intra Uterine Device

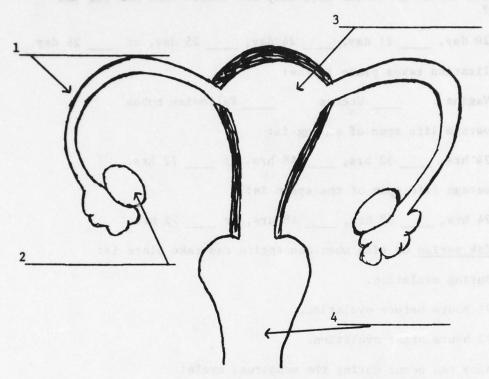
3-h - The Pill - 21 Day Version

3-i - The Pill - 28 Day Version

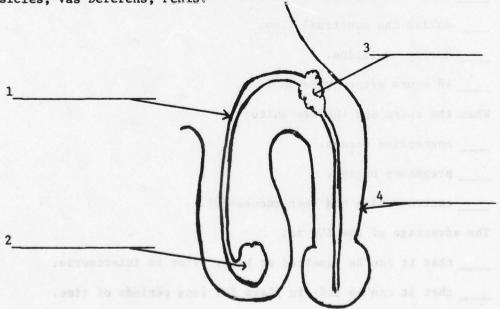
	rost-test	
INSTRU	UCTIONS: Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answers that statement. Mark an "X" on the line or lines in front of your answer(s).	ı
EXAMPI	LE: Boston is the capital of:	
	Connecticut X Massachusetts Vermont	,
1. Th	he disadvantages of the pill are that:	
_	they are not reliable.	
_	they may cause cancer.	
_	they cause an increase in the menstrual flow.	
_	they cause a weight gain.	0
	they are expensive.	
_	they may cause nausea, swelling, and some abdominal pain.	
2. Th	ne advantages of the birth control pills are that they:	
_	are easy to use.	
_	are reliable.	
_	are free of side effects.	ě
_	are safe for all women.	
3. If	f a birth control pill is missed:	*
_	start a new set of pills right away.	
_	take two the next day.	
-	use some other form of birth control until the next menstrual period is finished.	



4. Label the parts of the female reproductive organs: Owaries, Vagina, Uterus, Fallopian tubes.



5. Label the parts of the male reproductive system: Testicles, Seminal Vesicles, Vas Deferens, Penis.





types?	
20 day, 21 day, 24 day, 25 day, or 28 day.	
Fertilization takes place in the:	
Vagina Uterus Fallopian tubes	
The average life span of an egg is:	
24 hrs, 32 hrs, 48 hrs, or 72 hrs.	
The average life span of the sperm is:	
24 hrs, 32 hrs, 48 hrs, or 72 hrs.	
The risk period or time when conception can take place is:	
during ovulation.	
72 hours before ovulation.	
72 hours after ovulation.	
Pregnancy can occur during the menstrual cycle:	
immediately after the menstrual cycle.	
during the menstrual flow.	
during ovulation.	
48 hours after ovulation.	
When the sperm and the egg unite:	
conception occurs.	
pregnancy begins.	
contraception has been successful.	
The advantage of the IUD is:	
that it can be inserted at home, prior to intercourse.	
that it can be left in place for long periods of time.	
it doesn't need to be checked, except once a year.	



14.	The IUD works by:
	preventing the egg from being fertilized.
	preventing the fertilized egg from attaching itself to the uterine wall.
	preventing the fertilized egg from leaving the fallopian tubes.
15.	The disadvantage of the rhythm method of birth control is:
	that it is costly to keep all the records needed to be effective.
	that it is time consuming to insert the needed devices.
	that it is not reliable.
16.	The advantages of the rhythm method of birth control is:
	that no medicines/devices are needed.
	that it is extremely reliable.
	that you know exactly when pregnancy can occur.
17.	The rhythm method of birth control is:
	a method of movement during sexual intercourse.
	abstinence from sexual intercourse during ovulation.
	withdrawal of the penis from the vagina before sperm can be deposited.
18.	The disadvantages of the diaphragm are:
	the need for devices and medicines.
	not effective.
	that it will not work without the medications.
19.	The advantage of the diaphragm is that it is:
	easy to use during spontaneous sexual relations.
	quickly placed during intercourse.
	extremely effective.



20.	The dangers of venereal disease are:	
	that they are infectious.	
	that they may cause mental illness.	
	the possible infection of an unborn child causing congenital birth defects.	
21.	The diaphragm is a rubber disk place in the fallopian tubes, uterus, or (Circle One)	
	vagina, to prevent fertilization.	
22.	The two most common types of venereal disease are:	
	Gonorrhea Vaginitis	
	Herpes Simplex Syphilis	
23.	A disadvantage of a vasectomy is that:	
	it is a complicated operation.	
	it is permanent and cannot be "fixed".	
	it requires a short stay in the hospital.	
24.	An advantage of a vasectomy is that:	
	it is a simple operation with no change in sexual desire.	
	either partner can have the operation.	
	it is not permanent.	
25.	Vasectomy is an operation performed on the sex glands of a:	
	Man Woman	
26.	A disadvantage of the IUD is:	
	if inserted incorrectly, the body can reject it.	
	it can cause the woman considerable pain once a month.	
	it cannot be checked without seeing a doctor.	
27.	Removal of the unfertilized egg from the uterus is called:	



28.	Movement of the egg from the ovaries to the fallopian tubes is called:
29:	Match the correct word (letter) with the proper definition.
	A) Ovaries Produces eggs B) Ovulation
	C) Uterus Where the egg is fertilized D) Fallopian Tubes
	Occurs on about day 15 of the menstrual cycle
	Where the baby is formed after the egg is fertilized
30.	The menstrual cycle occurs about every:
	25 days, 28 days, 30 days, 31 days.
31.	The function of the menstrual cycle is to:
	shed the lining of the uterus.
	clean the fallopian tubes.
	produce new eggs.



INCLOSURE 4

"halfas

Formative Evaluation: Patient Version

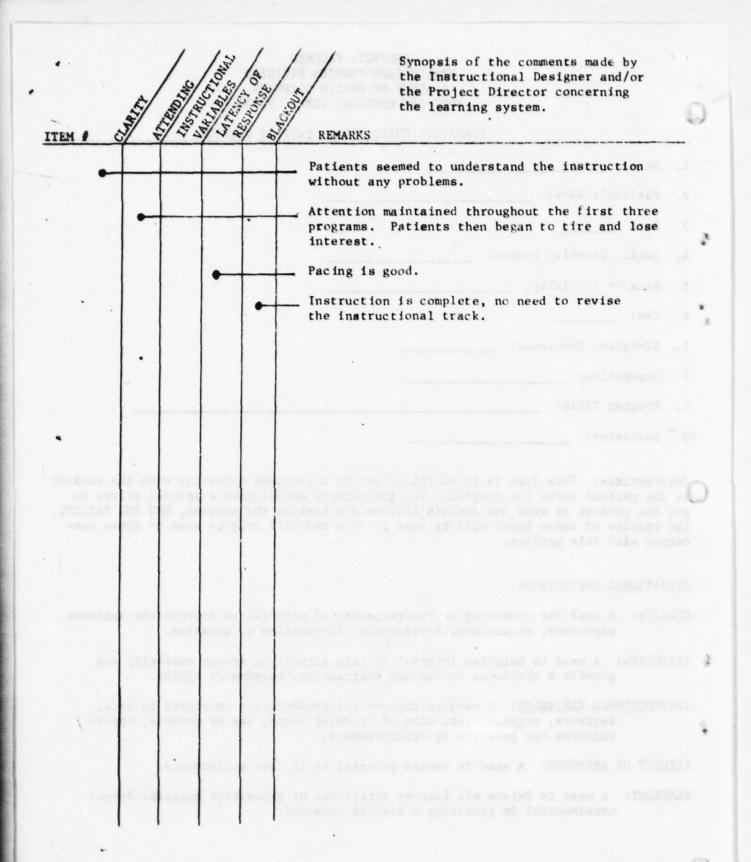
#### FORMATIVE EVALUATION: PATIENT VERSION

1.	Date:
2.	Patient's Name:
3.	Age:     rever many agranged a Araganan
4.	Social Security Number:
5.	Race or Ethnicity:
6.	Sex:
7.	Education. Completed:
8.	Occupation:
9.	Program Title:
10.	Evaluator:

Instructions: This form is to be filled out in a personal interview with the patient as the patient works the program. The interviewer should make a special effort to put the patient at ease and explain that we are testing the program, NOT THE PATIENT. The results of these tests will be kept private and will only be seen by those concerned with this project.

#### **OPERATIONAL DEFINITIONS:**

- CLARITY: A need for rewording or rearrangement of material to improve the sentence structure, vocabulary, explanation, instruction or question.
- ATTENDING: A need to heighten interest to gain attention, arouse curiosity and provide a challenge to learner distraction, boredom or apathy.
- INSTRUCTIONAL VARIABLES: A need to improve the presentation in regard to pace, sequence, organization, size of learning steps, use of prompts, opportunities for practice or reinforcement.
- LATENCY OF RESPONSE: A need to revise material to improve performance.
- BLACKOUT: A need to delete all learner activities or expository material decmed nonessential in producing a desired response.



707 ESE MOT 384

INCLOSURE 5

Physician Evaluation Form

PHYSICIAN/NURSE	CLINICIAN EVALUATION FORM
DATE 8 Aynl76	FORMAT Video Tage
SUBJECT TOMILY PARMY	TITLE To / lana.
EVALUATOR K Olnerand MD	Illo, Weering
IS THE SUBJECT COVERED COMPLETELY?	

WHAT WOULD YOU ADD?

WHAT WOULD YOU DELETE?

IS THE CONTENT ORGANIZED PROPERLY? MAD IF NOT, HOW WOULD YOU CHANGE THE SEQUENCE?

ARE ALL THE CRUCIAL GENERAL SEMENAL OF MANY AND LIVE EFFECTIVES WITH HIS DISEASE OR PROBLEM.)

IF NOT, PLEASE ELABORATE.

ARE FAMILIAR SYMBOLS AND CONCEPTS USED TO HELP EXPLAIN UNFAMILIAR SUBJECT MATTER?

The orbitation or orand in an excellent simple shower of theight

FOR WHAT PATIENT POPULATION WOULD YOU RECOMMEND THIS PRESENTATION?

Any population 8 or & more which family planning. Would be recelled for adolecants

DO YOU FEEL THE PRESENTATION IS TOO LONG, TOO SHORT AND WHY?

The fine allated is more than adequate.

INCLOSURE 6

Final Staff Evaluation

### FINAL STAFF EVALUATION

SUBJECT:	Family Planning	TITLE: Family Planning	
WORKING TIME	1 Hour	DATE PRODUCED: 1975	
FORMAT:	'ideo Tape	DATE EVALUATED: April 1976	
PRODUCER:	MedFact, Inc. , Massillon	n, OH	
PRICE: See (	Cost Analysis, Table 5	INTENDED AUDIENCE: General Adult	
to		es of Family Planning methods availab asectomy, I.U.D., Rhythm Method, and	<u>le</u>
OBJECTIVES:	Met the basic requirement objectives.	ts of the learning system behavioral	154
materials to		was necessary to develop the following ystem: Privacy Act Statement, Pre & Behavioral Objectives.	<u>ng</u> 
DEFINITION OF	SELF-INSTRUCTIONAL FEATUR	RES	
PRE-TEST		the beginning of the instructional ect entry level (prior knowledge) of sented.	
OBJECTIVES	Description of what the successful completion of	e subject will be able to do upon of the learning system.	
PRACTICE	Questions or tasks in t	the instructional system similar to the	ne
POST-TEST		the conclusion of the instructional symbol has learned the intended information	
FEEDBACK	Initial reactions to the (interviewed comments).	ne instructional system by the patient	Ė

PLEASE TURN PAGE

ATTITUDE Measures feelings, emotions, or attitudes towards the instructional strategy, its concepts and contents.

The learning system contains the self-instructional features marked with a . The results of each trial (version) are listed to the right of the feature.

Self-Instructional Features	1st Version	2nd Version	3rd Version
Pre-test	Zero of 12 passed	1 of 11 passed.	4 of 7 passed.
Objectives	See Behavioral Obje	ctives	
Practice	See Instructional S	ystem	
Post-test	8 of 12 passed.	9 of 11 passed.	7 of 7 passed.
Feedback	See Formative Evalu	ation	
Attitude Scale	See Process Evaluat	ion	
TECHNICAL ASPECTS:			
Sound: Poor	Fair Good	Excellent	
Photography:			

MATRIX FOR FIELD IMPLEMENTATION

TITLE: Family Planning

TRACK	PRODUCER	COPYRIGHT	PHOTOGRAPHY	SOUND	SCRIPT	RECOMMENDATIONS
Family Planning	MedFact	Permission to convert to video- tape would have to be secured.	New graphics will have to be produced by TASO artists, unless copy- right permis- sion is secured.	Record a new sound track, or secure copyright permission.	Used in original form.	Secure copyright permission and convert to video-tape.
Vasectomy	=	:	; :	=	:	=
Intra Uterine Device - I.U.D.		:	8287 TORO			=
The Pill			"	E	:	=
The Rhythm Method		=	:	=	=	=

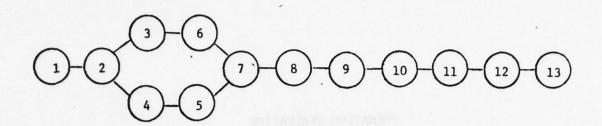
## APPENDIX 6

FORMATIVE EVALUATION

Vaginitis

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## SUMMARY NETWORK OF INSTRUCTIONAL DESIGN FOR VAGINITIS



#### EVENT IDENTIFICATION

- 1. Topic Selected: Vaginitis.
- 2. Met with Content Consultant p. 317.
- 3. Develop Behavioral Objectives, p. 317.
- Conduct "Real World" Search for Existing Educational Software on Vaginitis, p. 317.
  - 5. Evaluate Existing Educational Software p. 317 (none in existence).
  - 6. Write Criterion Measures (Pre-test Post-test). Incl 2-c and f.
  - Design Instructional System. (See Instructional System for Vaginitis, p. 317.
  - 8. Conduct Formative Evaluation,  $\rho$ . 318 See Patient Evaluation Form (Incl 3) and Interview Comment Sheet (Incl 4).
  - 9. Data Collection, p. 318.
  - 10. Revisions, p. 320.
  - 11. Conduct Physician Evaluation, p. 320.
  - 12. Cost Analysis , p. 325 and Table 5, p. 326.
  - 13. Final Staff Evaluation, p. 325 and Incl 7.

#### 1. INTRODUCTION.

a. The following is a chronological representation of the systems approach to instructional design after the topic selection was made. Each event, as it appears in the Summary Network of the Instructional Design (p. 316), will be discussed in detail (Refer to corresponding numbers in the summary.) to give the proper perspective of the total developmental process.

#### (2) Initial Contact With the Content Consultant.

(a) In January 1976, the Instructional Designer met with the Content Consultant to outline the behavioral objectives for the instructional learning system on Vaginitis.

### (3) Behavioral Objectives.

(a) The Vaginitis behavioral objectives are statements of tasks that the patient will be able to perform upon successful completion of the learning system. See Inclosure 1, page 327, for a list of these objectives.

#### (4) "Real World" Search.

(a) There weren't any "real world" materials dealing with vaginitis. Consequently, it became necessary to develop all of the educational software for implementation in the Vaginitis Learning System.

#### (5) Existing Educational Software Evaluation.

(a) See paragraph (4) above, "Real World" Search.

#### (6) Criterion Measures.

(a) The criterion measures were written to determine the subject's entry level, (pre-test score), insure that the instruction taught the objectives (tasks the patient must master), and that the instructional system was effective (minimum of 80 percent competency level). See Inclosure 3.

#### (7) Vaginitis Instructional System.

(a) The following is a list of the forms necessary to administer the instructional strategy for Vaginitis. These forms represent the paperwork actually encountered by each patient when s/he was given the learning system. Each form, including the learning track, falls in the proper order of sequence. See Inclosure 3, a-f.

a) Privacy Act Statement

b) Demographic Data: Vaginitis

c) Vaginitis Information (Pre-test)

d) Vaginitis Objectives

- e) Educational Intervention: Vaginitis
- f) Vaginitis Information (Post-test)

### (8) Formative Evaluation.

- (a) During the formative evaluation stage for Vaginitis, the system was tested on a combination of subjects from the nursing staff, non-professional MEDDAC personnel, and patients from the Family Practice Clinic. The Project Director and/or the Instructional Designer was present for each instructional session to evaluate the subject's reaction to the learning system. If the subject encountered learning problems during the presentation of the learning strategy, the difficulties were noted on the Formative Evaluation: Patient Version Form (See Inclosure 4) so that necessary revisions could be made.
- (b) At the conclusion of the learning session, each subject was interviewed to obtain comments concerning his/her personal feelings about the program. Information is provided as follows:
  - 1 What were the most difficult parts of the lesson? "Nothing, it was outstanding."
  - What was the best feature of the instruction? "All of it, it helped me alot." "Extremely helpful." "It answered questions I had had for a long time."
  - What was the worst feature of the lesson? Patients had no comments to this question.
- (9) Data Collection.

  The following is a compilation of demographic, test (prepost), and process evaluation data.

#### (a) Demographic Data.

- $\underline{1}$  A total of 30 subjects were used during the formative evaluation stage of Vaginitis. These subjects were comprised of a cross section of nursing staff, non-professional MEDDAC personnel, and patients from the Family Practice Clinic.
- Source Breakdown: There were 15 patients from the Family Practice Clinic, seven non-professional MEDDAC personnel, and eight members of the nursing staff used as subjects.
- 3 Sex Breakdown: Because of the nature of this disease, all 30 subjects were females.

- 4 Age Breakdown: Fourteen subjects were in the 15-25 year age group, eight from 26-35 years of age, three from 36-45 years of age, three were 46-55 years of age, and two were above 60 years of age.
- 5 Occupation Breakdown: The occupation data is as follows: 15 housewives, three administrative personnel, eight nurses, and four students.
- 6 Marital Status: The marital status information is as follows: 12 married, 17 single, and one divorced subject.
- 7 Educational Level Data: Nine subjects had a high school education, 11 subjects had attended 1-3 years of college, nine subjects had obtained a Baccalaureate Degree, and one had obtained a Master's Degree.
  - (b) Pre and Post-test Data Collection.
- $\underline{1}$  There were 26 possible correct responses to the Vaginitis Information Pre and Post-tests. The results as follows:
- <u>a</u> Pre-test Score Range: Of the 30 participants, the highest number of correct responses was 25 and the lowest number of correct responses was zero.
- <u>b</u> Post-test Score Range: The highest number of correct responses was 26 and the lowest number of correct responses was 13.
- <u>c</u> Total Scores -- Pre-test: 583 correct responses out of 780 possible points = 75 percent, the average percentage correct.
- $\underline{d}$  Total Scores -- Post-test: 719 out of 780 possible points = 92 percent, the average percentage correct.

(The average percentage scores were derived by dividing the total number of correct responses of the 30 subjects by the total possible points.)

#### (c) Correct Response Analysis.

1 The pre and post-tests were evaluated to determine areas to be strengthened or revised. Each subject's test responses were listed according to the corresponding behavioral objective and criterion measure. See Tables 1 and 2, pages 321-322, for the Correct Response Analysis - Pre-test and Post-test.

### (d) Process Evaluation.

<u>1</u> The process evaluation measured the opinions to-ward the instructional strategy. The results are as follows: As a result of this learning experience, 24 subjects thought they had misconceptions about Vaginitis. Six felt they had no misconceptions. Twenty-three subjects thought the learning experience clarified these misconceptions. Seven subjects indicated that the misconceptions were not adequately clarified. See Table 3, page 323, for the Tabulation of Process Evaluation Responses.

- 2 Seven subject areas were listed in the Comment Section of the Process Evaluation Form for Vaginitis. A synopsis of the comments obtained in this section are provided as follows:
- a Physical Setting: "Good, because it was a small area with few people." "Outstanding." "The setting is very conducive to a learning experience."
- b Health Educator: "Well aware of subject, well briefed." "Outstanding." "Seems interested in delivery of information."
- C Audio-Visual Equipment: "Helpful, interesting."
  "Outstanding." "Video tape is more effective (interesting) than slides or filmstrips."
- d Patient Education Programs: "Helpful." "Outstanding." "Extremely pertinent to several areas."
- e Paperwork: "Outstanding." "Good for alerting patient about (their) weak areas of knowledge."
- f Patient Learning Concept: "Patient has pinpointed for him/herself areas where s/he is lacking accurate knowledge."
- $\underline{\mathbf{g}}$  Other: Most patients failed to fill in this section.

### (10) Revisions.

- (a) The first, second, and third version results of Vaginitis Information Pre and Post-test results are shown on the Total Pre and Post-test Scores, Table 4, page 324. The revisions brought third version test scores up to the 80 percent competency level for 100 percent of the test population.
  - 1 Rationale for the Revision on the Pre and Post-tests.
- a The percentage of negative comments about the choice of words in the pre/post-tests necessitated minor revisions to clarify the meaning of the questions for the patients.

# (11) Physician Evaluation.

(a) Upon completion of the revisions in the learning strategy, the Content Consultant (physician) reviewed the entire program and evaluated the content for the target population. See Inclosure 5, Physician Evaluation Form.

VAGINITIS INFORMATION CORRECT RESPONSE ANALYSIS - PRE-TEST

NUMBER OF INCORRECT RESPONSES *	7	5	7	0	CD	5	5		80	000	6	6	6	CD	5	80	5	4	8	3	7	9	7	6	7	3	
RESPONSE ANALYSIS	++++++++++++++++++++++++	+++-+++++++++++++++++++++	~ + + + + + + - +   + + - + + + + + + + +	-+++	++-+-+++-+	+++-+++++++++++++++++++++++++++++++++++	++++++++++++++++++++++++++	+-+++++-+-+-+-+-+	+++++-+-++++++++++++	+++++++++-+-+++++-+	+++-+-++++++++++++++++++	+-+++-+-+++++++++++++++++	+++++++++-++++-	+++-+-+++-++	++++-+-++++++++++++++++++++++++++++	+++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++++++++++	~ + + - + + + + <del> </del> + + + + + + + + + + + + + + + + + + +	~ - + + + + + + - + + + - + + + + + +	+++++++++++++++++++++++++++++	+-++++++++++++++++++++++++	+++-+-++++++++++++++++++++	++++-+-+++++++++++++++++	+++++++-+++++-+-+-+-+-+	+++-+-+++++++++++++++++	+++++++++++++++++++++++++++++++++++++++	- = INCORRECT RESPONSE
CRITERION MEASURES (Incl 2-c)	1			2			3	4	5					9			7		00		6	10	11		12	13	
BEHAVIORAL OBJECTIVES	1			2			3	3	4					5			9		7		80	80	6		6	10	

TABLE 1

+ = CORRECT RESPONSE

● CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

\*RESULTS TABULATED ON THE PRE-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

TABLE 2

# VAGINITIS INFORMATION CORRECT RESPONSE ANALYSIS - POST-TEST

1	BEHAVIORAL OBJECTIVES	MEASURES							•		3				-											NUMBER OF INCORRECT
+         +	1	1	+	+	1	1	1.		++	+	+	+	4	+	+		+		1	+	+		-	+	+	KESPONSES*
+         +		2	+	1	1		+		+	+	+			+	+		+	1		+	1		1	+	1	000
+         +		3	+	1		+			_	1		+	+	+	1	+	+	+		+				+	+	9
+         +				+						+					+					+		+	1	+	+	0
+         1         1         +		7	+++		1	+ +	+	+						+	+	+	+			+	+			+	+	5
1         1         4		2		1											+	+	_		+	+	+	1	1	+	+	7
1         +		9	+++			+			++	+					+		+	1	+	+				1	+	7
+         +				+	+		+		_	+					+					+	+			1	+	1
+         +		7		+					_						+				+	+				+	+	2
+         +				+					-														1	+		3
+         +		00	+ + +				+	+	++	+										+	+			+	+	5
+         +			+++	1	+		+								+									+	+	7
+ + + + + + + + + + + + + + + + + + +				1		+	+		+	+										+		+		+	+	1
+         +		6	- 1	+	+	+	+		_						+										+	1
+ + + + + + + + + + + + + + + + + + +				1		1			-											+	+	+		+	+	2
1         +				1			+			+					+					+				+	+	7
+ + + + + + + + + + + + + + + + + + +				+			+																	1	+	7
+ + + + + + + + + + + + + + + + + + +			+	+					-	+				+	+										+	0
+ + + + + + + + + + + + + + + + + + +		10		+					-			5			+					+				+	+	0
+ + + + + + + + + + + + + + + + + + + +		11		1		+	+		++	+							+								+	1
+++++++++++++++++++++++++++++++++++++++		12		1		+	+	+	-					+	+									+	+	2
+++++++++++++++++++++++++++++++++++++++				1					+	+														+	+	3
+++++++++++++++++++++++++++++++++++++++			- 1	+					-															+	+	2
-+++++++++++++++++++++++++++++++++++++		13		+		+	+	+	-	+														1	+	2
+++++++++++++++++++++++++++				+		1	+	+	-	+										+				1	+	2
				1		+	+			+															+	1

- = INCORRECT RESPONSES

+ = CORRECT RESPONSES

C = CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

\*RESULTS TABULATED ON THE POST-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED. NO REVISIONS WERE NECESSARY IN THE FINAL SYSTEM.

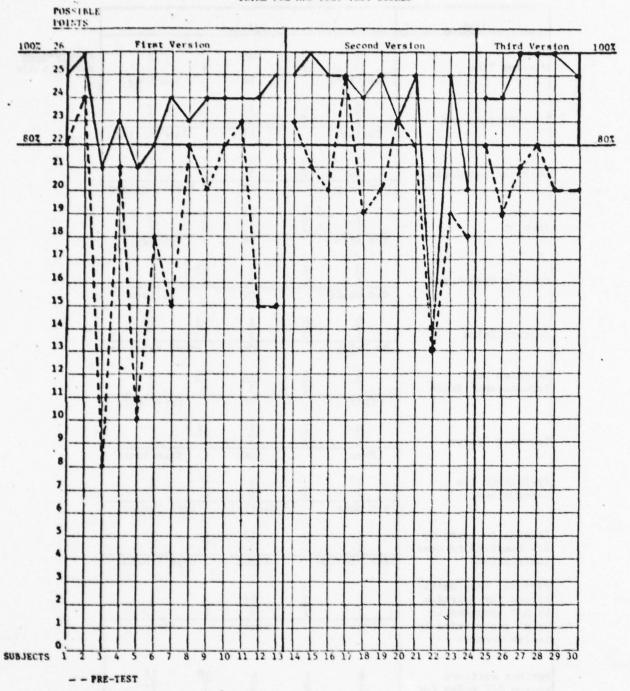
# TANULATION OF PROCESS EVALUATION RESPONSES VAGINITIS

Item	terral de	Market he	Opinion		
Viewing Time	1 1	$\frac{0}{2}$	$\frac{26}{3}$	3 4	0 5
	Too Short		OK		Too Long
Content Interest	0 1	<u>,</u>	21	74	2/5
	Boring		ok	F	ascinating
Questions on Topic	0 1 No Help	0 2	8 3 OK	7 4	15 5 eally Helped
Pace	0 1	$\frac{1}{2}$	27	2/4	5
	Too Slow		ок		Too Fast
Content Uniqueness	0 1	$\frac{1}{2}$	9 3	15	5 5
	Old Stuff		OK		All New
Content Value	0 1	0 2	8 3	12	10 5
	No Value		OK	Mo	st Valuable
Learning Lab Technicians' Style	0 1	0 2	13	11	6 5
	Poor		OK		Excellent
Learning Center	0 1	$\frac{2}{2}$	8 3	14	6 5
	Poor		OK		Excellent
Preference for Instruction	17	3 2	2/3	64	2/5
	A/V Mode		Neutral	Li	ve Teacher
Freedom to learn by A/V compared to usual	1 1	2/2	$\frac{1}{3}^2$	64	9 5
instructions	Less Freedo	m	Equa 1	Mo	re Freedom
Personal responsibi- lities for learning . by A/V compared to	0	3 2	14	5 4	8 5
usual instruction by health workers	Less	2	Equal	İ	More
Patient attitude toward A/V modes for	0	1/2	6 3	10	<u>13</u>
health education	Poor		Neutral		Excellent
Patient viewing of commercial TV in	3	$\frac{12}{2}$	5 3	64	4 5
hours during the day	Less Than		Hours		More Than

Tabulations Rating Scale

TABLE 4

# VAGINITIS TOTAL PRE AND POST-TEST SCORES



- POST-TEST

# (12) Cost Analysis.

(a) The following (See Table 5, page 326) is an analysis of the costs inherent in developing a learning system for Vaginitis. The costs are listed in three separate categories; 1) hardware (equipment), 2) software (educational materials), and 3) administrative (salaries, reproduction costs, etc.). For further cost information, see Appendix 9, pages 477-479, Current Baseline Information and Cost Analysis.

# (13) Final Staff Evaluation.

(a) Upon completion of the formative stage of the evaluation, the learning system was evaluated as a total package. See Inclosure 6, Final Staff Evaluation Form.

TABLE 5
VAGINITIS COST ANALYSIS

HARDWARE	DEVELOPMENTAL AND INVESTMENT COSTS (Price per Unit)	RECURRENT COST PER 1/2 HOUR
SONY: Video Tape Recorder TV Monitor	Price per unit no longer needs to be added. Initial investment cost was anno- tated under hypertension.	\$0.073 .04
Nee debone	ream completion of the t must be availabled as a schal pack	.001
Headphones		.001
Listening Center	For each piece of equip-	.001
Maintenance	ment = ½c/Unit ½ Hour	.025
SUB-TOTAL	-0-	\$0.14
SOFTWARE		
PACOMED Script (Advanced Organizer)	-0-	\$0.016
PACOMED Vaginitis	\$45.00	.004
SUB-TOTAL	\$45.00	\$0.02
TOTAL.		\$0.16
ADMINISTRATIVE COSTS		
Developmental	\$454.00	
Typing & Reproduction	132.00	
Paperwork to Individu- alize strategy		\$0.05
SUB-TOTAL	\$586.00	\$0.05
TOTAL	\$631.00	\$0.21

#### INCLOSURE 1

Vaginitis Objectives

# VAGINITIS OBJECTIVES

Upon completion of this learning program the patient will be able to:

- 1. Define vaginitis.
- 2. List the symptoms of vaginitis.
- 3. Explain that vaginitis is not venereal disease.
- 4. Explain the importance of having a physical examination.
- 5. List the causes of vaginitis.
- 6. Explain the types of medications used in the treatment of vaginitis.
  - A) Application of medication directly to the infected areas.
  - B) Oral drugs.
- 7. Explain the role of personal hygiene in the treatment of vaginitis.
- 8. List the reasons for avoiding wearing tight shorts or slacks that do not allow for proper ventilation.
- List the reasons for wearing cotton clothing rather than clothes made of leather or nylon.
- Explain why sexual relations should be modified or restricted until recovery is complete.

# inclosure 2

Initial Staff Evaluation Forms

# INITIAL STAFF EVALUATION FORM

SUBJECT Vaginitis	TITLE (Vaginitis
WORKING TIME 11 Minutes	DATE PRODUCED March 1976
FORMAT Video Tape	DATE EVALUATED March 1976
PRODUCER Project: PACOMED	PURCHASE/RENTAL SOURCE
PRICE \$45.00	
AVAILABILITY: CONTRACT PRODUCER OR COORD	INATOR DIRECTLY.
SYNOPSIS Discusses the causes and differ	ent types of Vacinitie. Talks shout how
to treat Vaginitis and the types of medic	ation used in the tweetmant
Points out specifically that Vaginitis is	not Venereal Disease.
INTENDED AUDIENCE General (Adult/High Sc	Last Assay
OBJECTIVES Covers behavioral objectives	listed in the learning system.
OBSECTIVES TOTAL OBJECTIVES	risted in the learning system.
TECHNICAL ASPECTS:	
SOUND: POOR FAIR GOOD	EXCELLENT X
	EXCELLENT X
SPECIAL STRENGTHS AND/OR WEAKNESSEST	he video tape was produced as part of a
total learning system. As such, it works	s well with the forms developed for con-
system: Privacy Act Statement Demograph	owing are the forms used in the learning hic Data, Pre-test, Behavioral Objectives,
and Post-test.	nic bata, Fre-test, Benavioral Objectives,
COULD THIS FORMAT WORK EFFECTIVELY BY ITS	ELF? Yes
EXPLAIN:	
***	
	BE USED AS A SUPPLEMENT TO OTHER INSTRUCTION
YES_X	NO
EXPLAIN:	
POSITION: INSTRUCTIONAL DESIGNER	

AHS FORM 15 (PACOMED) 25 Mar 1975

# INCLOSURE 3

Vaginitis Instructional System Forms

isociving to taxely as he a - f

# PRIVACY ACT STATEMENT (5USC 552a)

1. Authority for collection of information including Social Security Number:

Section 3012, Title 10, US Code.

2. Principal purposes for which information is intended to be used:
To assist medical research personnel in the monitoring of individual patient performance and in evaluation of the PACOMED concept.
The last four digits of the SSN identifies the patient and allows for computer consolidation, comparison, and retrieval of individual data, and cross reference with the outpatient record if required.

### 3. Routine uses:

Scale

This information may be used in research pertaining to the planning and development of a prototype patient and community health staff education module; in the establishment of an objective and behavioral data bank; and in the development of appropriate medical instructional systems. Individual data may be used in the analysis and discussion with other AMEDD personnel and consolidated in research reports for general release. No information that identifies any individual patient or physician will be released.

- 4. Providing of this information is voluntary but failure to provide will result in your exclusion from the research project.
- 5. The following forms are currently in use with this statement:

Nelson-Denny Scale

AHS Form Demographic Data: Vaginitis
Pre Test Vaginitis Information
Post Test Vaginitis Information
AHS Form Demographic, Baseline Data, & Test Scores: Vaginitis

AHS Form Process Evaluation: Vaginitis

AHS Form Six Month Follow-Up Data: Vaginitis

Scale Rotter's I.E. Scale

Demographic Data: Vaginitis

INS	STRUCTIONS: Please answer each information. If yo hesitate to ask the	ou have any questions, do not
FUI	LL NAME:	the Capture the Capture of Lines of the capture of
ADI	DRESS:	
	(Street)	(City) (State) (Zip)
TEI	LEPHONE NUMBERS: Home	Work
1.	Last four digits of sponsor's	SSN:
	cleases up.	wait for five days to see if it
2.	Date:	
3.	Patient's Status (Circle One)	Service Member or Dependent
4.	Sponsor's Rank/Status:	J see a doctor.
5.	Sex: and blands contribut from	
6.	Age last birthday:	. Baqqqota
7.	Marital Status:	
	Married: Single:	Divorced:
	Widowed: Engaged:	
8.	Education Completed:	
	Elementary School(Grades 1-6)	1-3 Yrs College
	Total West Colored	Baccalaureate Degree
	Junior High School (Grades 7-8)	Master's Degree
	High School (Grades 9-12)	Doctor's Degree

# Vaginitis Information

STRUCTIONS: Read each statement carefully. The statements listed may have more than one correct answer and in some statements, all answers may be correct. Decide which	
choice or choices best answers that statement. Mark an "X" on the line or lines in front of your answer(s	
AMPLE: Boston is the capital of:	
Connecticut X MassachusettsVerm	ont
During the treatment of vaginitis, if there is unusual bleeding swelling you should:	or
swelling you should.	
wait for five days to see if it clears up.	
stop your treatment as prescribed. You may be allergic to	0
your medication.	349 .5
see a doctor.	
During treatment of vaginitis, your sexual relations should be:	
stopped.	
modified (by sexual partner wearing a condom.)	
continued as desired.	
idogad: Engaged: Coparaced:	
To prevent vaginitis you should avoid:	
wearing clothing more than one day.	
wearing tight shorts or slacks.	
wearing clothes that are not "color fast" world dall make	
wearing clothes that are not color last	
Vaginitis is:	
a form of venereal disease.	
an inflamation of the vagina.	
an infection of the uterus, stemming from the vaginal area	
an intection of the dietas, stemming from the vaginar area	

# Vaginitis Information

5.	Which of the following	are symptoms of vagi	initis?
	Itching	Weight Gain	Loss of Sleep
	Swelling	Vaginal Dischar	gel slot to mortal quos no
6.	It is important to have you might have vaginiti	s because:	your physician if you think
	you could be pre	egnant.	
	you cannot tell under the micros	if it really is vagi	nitis unless looked at
	only your doctor case of vaginiti	will be able to tel	1 you how to treat your
7.	There are two different treatment of vaginitis, to its method of applic	local and oral. Ma	that can be used in the tch the kind of medication
		Flagyl	Vaginal Inserts
	2) Local	Acid Douche	Vaginal Creams
8.	Which of the following	are causes of vagini	tis?
	Protozoa	Fungi	_ Bacteria
9.	One way to avoid vagini	tis would be to:	
	watch your diet.		
	get plenty of sl	eep.	
	make sure you we	ar clean, ventilating	g clothing.
0.			ommon types of vaginitis?
	Herpes Simplex		
	Bacterial		
	Gonorrhea		
	Trichomonal		
	Monilial		

# VAGINITIS OBJECTIVES

Upon completion of this learning program the patient will be able to:

- . Define vaginitis.
- . List the symptoms of vaginitis.
- . Explain that vaginitis is not venereal disease.
- . Explain the importance of having a physical examination.
- . List the causes of vaginitis.
- . Explain the types of medications used in the treatment of vaginitis.
  - A) Application of medication directly to the infected areas.
  - B) Oral drugs.
- . Explain the role of personal hygiene in the treatment of vaginitis.
- . List the reasons for avoiding wearing tight shorts or slacks that do not allow for proper ventilation.
- . List the reasons for wearing cotton clothing rather than clothes made of leather or nylon.
- Explain why sexual relations should be modified or restricted until recovery is complete.

Educational Intervention: Vaginitis

# Vaginitis Information

			Post-test		
INS	TRUCTIONS:	may have statemen choice o	e more than one correct its, all answers may lor choices best answer	y. The statements listed of answer and in some be correct. Decide which is that statement. Mark in front of your answer(s).	
EXA	MPLE:	Boston i	s the capital of:		
		c	onnecticut X	Massachusetts Texas	
1.	Which of t	he follow	ing are the three mos	st common types of vaginitis?	
	Her	pes Simpl	ex Gonorrhea	Monilial	
	Bac	terial	Trichomor	nal	
2.	One way to	avoid va	ginitis would be to:		
		ch your d			
	get	plenty o	f sleep.		
	mak	e sure you	u wear clean, ventila	ting clothing.	
3.	Which of t	he follow	ing are causes of vag	initis?	
	Pro	tozoa .	Fungi	Bacteria	
		of vagini	tis, local and oral.	ion that can be used in the Match the kind of medication	
	1) Oral	_	Flagyl	Vaginal Inserts	
	2) Local	_	Acid Douche	Vaginal Creams	1
			have an examination b nitis because:	y your physician if you think	
	you	could be	pregnant.	only your doctor will be	
	You	cannot to	ell if it really	able to tell you how to	
	is		unless looked at	vaginitis.	Q

# Vaginitis Information

6.	Which of t	the following a	re symptoms of va	aginitis?	
	Itc	ching	Weight Gain		Loss of Sleep
	Swe	elling	Vaginal Discharg	ge , f	
7.	Vaginitis	is:			
	a f	orm of venerea	l disease.		
	an	inflamation of	the vagina.		
	an	infection of the	ne uterus, stemmi	ing from the	vaginal area.
8.	To prevent	vaginitis you	should avoid:		
	wea	ring clothing	nore than one day		
	we a	ring tight shor	rts or slacks.		
	wea	ring clothes th	nat are not "colo	or fast".	
9.	During tre	atment of vagin	nitis, your sexus	l relations	should be:
	sto	pped.			
	mod	ified (by sexue	l partner wearing	ng a condom.	)
	con	tinued as desi	red.		
10.		treatment of vou should:	vaginitis, if the	ere is unusua	al bleeding or
	wai	t for five days	s to see if it cl	ears up.	
		p your treatmen	nt as prescribed.	You may be	e allergic to
	see	a doctor.			

# INCLOSURE 4

Formative Evaluation: Patient Version

the Beyring treatment of weginfile, you begind relations about her

	FORMATIVE EVALUATION: PATIENT VERSION
1.	Date:
2.	Patient's Name:
3.	Age:
4.	Social Security Number:
5.	Race or Ethnicity:
6.	Sex:
7.	Education, Completed:
8.	Occupation:
9.	Program Title:
10.	Evaluator:

Instructions: This form is to be filled out in a personal interview with the patient as the patient works the program. The interviewer should make a special effort to put the patient at ease and explain that we are testing the program, NOT THE PATIENT. The results of these tests will be kept private and will only be seen by those concerned with this project.

#### **OPERATIONAL DEFINITIONS:**

CLARITY: A need for rewording or rearrangement of material to improve the sentence structure, vocabulary, explanation, instruction or question.

ATTENDING: A need to heighten interest to gain attention, arouse curiosity and provide a challenge to learner distraction, boredom or apathy.

INSTRUCTIONAL VARIABLES: A need to improve the presentation in regard to pace, sequence, organization, size of learning steps, use of prompts, opportunities for practice or reinforcement.

LATENCY OF RESPONSE: A need to revise material to improve performance.

BLACKOUT: A need to delete all learner activities or expository material deemed nonessential in producing a desired response.

Synopsis of comments made by the Instructional Designer and/or the Project Director concerning the Learning System. REMARKS Clarify how Vaginitis is caused. Music is too brassy, subjects complained. Script needs to emphasize sections dealing with feminine spray, cologne, colored toilet paper, wiping from front to back after a bowel movement, and that sexual relations should be modified until recovery is complete. Objectives were good. Script may need some cuts for pacing purposes. line Tameal ils speish of been A MillionDale INCLOSURE 5

Physician Evaluation Form

PHYSICIAN/NURSE CLINICIAN EVALUATION FORM DATE 9 april 1476 FORMAT 110 CTARS

SUBJECT NASIA, 115 TITLE VACININIS

EVALUATOR ROLLE HC PLOY ALC IS THE SUBJECT COVERED COMPLETELY? Co. 1 WHAT WOULD YOU ADD? Jenescent require More IS THE CONTENT ORGANIZED PROPERLY? SIF NOT, HOW WOULD YOU CHANGE THE SEQUENCE? 1 wouldnut ARE ALL THE CRUCIAL OBJECTIVES EMPHASI 10? (BEHAVIORS OR KNOWLEDGE TIME MUST MASTER IN ORDER TO COPE AND LIVE EFFECTIVELY WITH HIS DISEASE OR PROBLEM. IF NOT, PLEASE ELABORATE. "BACK TO FRONT" GHAVE COMBINE SO THE ADVICE IS
ALWAYS "FIRENCE I PING PONC - TRICH AS EN TOUR WATCH MAR. IS 0. PH SIT

ARE FAMILIAR SYMBOLS AND CONCEPTS USED TO HELP EXPLAIN UNFAMILIAR SUBJECT MATTER?

yes.

FOR WHAT PATIENT POPULATION WOULD YOU RECOMMEND THIS PRESENTATION?

all ladies.

DO YOU FEEL THE PRESENTATION IS TOO LONG, TOO SHORT AND WHY?

No.

Asme cantian to patient, rought be added - to entrace the conceptitual recurrences are very common and not threatening but that a presistent syngitamatic state should have fellowing wests -

# INCLOSURE 6

Final Staff Evaluation

# FINAL STAFF EVALUATION

SUBJECT:	Vaginitis	TITLE: _	Vagini	itis
WORKING TIM	ME: 11 Minutes	DATE PROD	UCED:	March 1976
FORMAT: _	Video Tape	DATE EVAL	UATED:	March 1976
PRODUCER:	Project: PACOMED			
	Cost Analysis pendix 9)	INTENDED	AUDIENC	CE: General (Adult/High School A
SYNOPSIS:	Discusses the causes an about how to treat Vagi in the treatment. Poin not Venereal Disease.	nitis and	the typ	es of medication used
OBJECTIVES	Met basic requirement objectives.	s of the 1	earning	g system behavioral
SPECIAL STE	RENGTHS AND WEAKNESSES:	The video	tane w	as produced as part
of a total	learning system. As su	ch. it wor	ks well	with the forms
developed f	or concurrent use withi	n the syst	em. Th	e following are the
	in the learning system:			
Data Form,	Pre-test, Behavioral Ob	jectives,	and Pos	t-test.
DEFINITION	OF SELF-INSTRUCTIONAL F	EATURES		
PRE-TEST:		ubject ent		of the instructional (prior knowledge)
OBJECTIVES	Description of what completion of the 1			be able to do upon
PRACTICE:	Questions or tasks the criterion measu		tructio	onal system similar to
POST-TEST:				of the instructional earned the intended
PPPDBACV.	Initial reactions t	o the fret	ruction	al evetem by the

patient (Interview Comments).

ATTITUDE SCALES: Measures feelings, emotions, or attitudes toward the instructional strategy, it's contents and concepts.

Self-Instructional Features	18	t Version	)	2nd V	ersion	3rd	Version
Pre-test	3 of	13 passe	ed. 4	of 11	passed.	3 of	6 passed.
Objectives	See	Behaviora	al Objec	tives			
Practice	See	Instruct	lonal Sy	stem			
Post-test	10 0	f 13 pass	sed. 9	of 11	passed.	6 of	6 passed.
Feedback	See	Formative	Evalua	tion			
Attitude Scale	See	Process B	Evaluat i	on			
		33.892 313	10.110		par-bitues		
TECHNICAL ASPECTS:	Poor	Fair	Good	Fvo	ellen <u>t</u>		
Sound:				- EXC	V .		
Photography:	N. Sell	. As. Jav			V		

MATRIX FOR FIELD IMPLEMENTATION

TITLE: Vaginitis

TRACK	PRODUCER	PRODUCER COPYRIGHT	PHOTOGRAPHY	SOUND	SCRIPT	RECOMMENDATIONS
aginitis	PACOMED	N/A	N/A	N/A	N/A	Some graphics should be re-drawn by a TASO artist in order to be more professional.

# APPENDIX 7

FORMATIVE EVALUATION

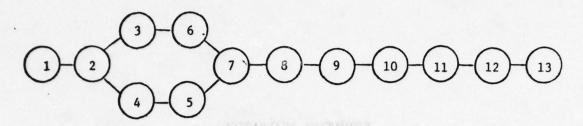
Low Back Pain

EVENT LOSN'TH TOAT THEY

PRECEDING PAGE BLANK

#### SUMMARY NETWORK OF INSTRUCTIONAL DESIGN FOR

#### LOW BACK PAIN



### EVENT IDENTIFICATION

- 1. Topic Selected: Low Back Pain
- 2. Met with Content Consultant, p. 353.
- 3. Develop Behavioral Objectives, p. 353.
- 4. Conduct "Real World" Search for Existing Educational Software on Low Back Pain, p. 353.
  - 5. Evaluate Existing Educational Software, p. 353.
  - 6. Write Criterion Measures (Pre-test Post-test), Incl 3, c & f.
  - Design Instructional System. (See Instructional System for Low Back Pain, Incl 3, a-g.)
  - Conduct Formative Evaluation. (See Patient Evaluation Form & Interview Comment Sheet, Incls 4 & 5.)
  - 9. Data Collection, p. 354.
- 10. Revisions, p. 356.
- 11. Conduct Physician Evaluation (See Incl 7.)
- 12. Cost Analysis, p. 356 and Table 5, p. 361.
- 13. Final Staff Evaluation. (See Incl 8.)

### 1. INTRODUCTION.

a. The following is a chronological representation of the systems approach to instructional design after the topic selection was made. Each event, as it appears in the Summary Network of the Instructional Design (p. 352), will be discussed in detail (Refer to corresponding numbers in the summary.) to give the proper perspective of the total developmental process.

# (2) Initial Contact With the Content Consultant.

(a) On 14 March 1976, the Instructional Designer met with the Content Consultant to outline the behavioral objectives for the instructional learning system on Low Back Pain.

### (3) Behavioral Objectives.

(a) The Low Back Pain behavioral objectives are statements of tasks that the patient will be able to perform upon successful completion of the learning system. See Inclosure 1, page 362, for a list of these objectives.

### (4) "Real World" Search.

(a) There was a dearth of "real world" materials dealing with low back pain. One video tape intitled "Backache" met the basic objective requirements of the learning system. This tape was purchased for the formative evaluation stage. See Inclosure 2 for source and Initial Staff Evaluation Form.

### (5) Existing Educational Software Evaluation.

(a) Evaluation of the existing educational software was conducted and documented on the Initial Staff Evaluation Form completed for package viewed. See Inclosure 2 for an example.

#### (6) Criterion Measures.

(a) The criterion measures were written to determine the patient's entry level, (pre-test score), insure that the instructor taught the objectives (tasks the patient must master), and that the instructional system was effective (minimum of 80 percent competency level). See Inclosure 3.

#### (7) Low Back Pain Instructional System.

(a) The following is a list of the forms necessary to administer the instructional strategy for Low Back Pain. These forms represent the paperwork actually encountered by each patient when s/he was given the learning system. Each form, including the learning track, falls in the proper order of sequence. See Inclosure 3, a-g.

- a) Privacy Act Statement
- b) Demographic Data: Low Back Pain
- c) Low Back Pain Information (Pre-test)
- d) Low Back Pain Objectives
- e) Educational Intervention: Backache Information

- f) Low Back Pain Information (Post-test)
- g) Low Back Pain Information (Posture demonstration)

### (8) Formative Evaluation.

- (a) During the formative evaluation stage for Low Back Pain, the system was tested on a combination of subjects from the physical therapy clinic, nursing staff, and MEDDAC non-professional personnel. The Project Director and/or the Instructional Designer was present for each instructional session to evaluate the patient's reaction to the learning system. If the patient encountered learning problems during the presentation of the learning strategy, the difficulties were noted on the Formative Evaluation: Patient Version Form (See Inclosure 4), so that necessary revisions could be made.
- (b) At the conclusion of the learning session, each patient was interviewed to obtain comments concerning his/her personal feelings about the program. Information is provided as follows:
- What were the most difficult parts of the lesson?

  A majority of the patients indicated that the pre and post-test needed to be revised.
  - What was the best feature of the lesson? "The section that dealt with exercises." "Instructions on how to stand, sit, bend, etc."
- What was the worst feature of the lesson?
  Patients had no comments to this question. All commented that they thought the, "program was very good."
- (9) Data Collection.

  The following is a compilation of demographic, test (prepost), and process evaluation data.

#### (a) Demographic Data.

- 1 A total of 30 individuals were subjects for the formative evaluation stage of Low Back Pain. These individuals were comprised of a cross section of subjects from the Physical Therapy Clinic, Nursing Service, and the MEDDAC non-professional personnel.
- 2 Source Breakdown: There were fifteen patients from Physical Therapy, three from Nursing Service, and 12 MEDDAC non-professional personnel.
- 3 Sex Breakdown: This evaluation was comprised of 12 male patients and 18 female patients.
- 4 Age Breakdown: Fifteen patients were in the 15-25 year age group, seven from 26-35 years of age, six from 36-45 years of age, one from 46-55 years of age, and one above the age of 66.

- 5 Occupation Breakdown: The occupation data is as follows: six housewives, 10 administrative workers, four technical specialists, six non-medical professionals, one student, and three medical professional personnel.
- 6 Marital Status: The marital status information is as follows: 19 married, one widowed, nine single, and one engaged patient.
- 7 Educational Level Data: Two patient had a 7th-8th grade education, 11 were high school graduates, 14 patients had attended 1-3 years of college, and three patients had obtained a Baccalaureate Degree.
  - (b) Pre and Post-test Data Collection.
- $\underline{1}$  Pre-test Score Range: Of the 30 participants, the highest number of correct responses was 13, and the lowest number of correct responses was one.
- $\frac{2}{15}$  Post-test Score Range: The highest number of correct responses was  $\frac{15}{15}$  and the lowest number of correct responses was nine.
- 3 Total Scores -- Pre-test: 237 correct responses out of 450 possible points = 53 percent, the average percentage correct.
- 4 Total Scores -- Post-test: 381 correct responses out of 450 possible points = 85 percent, the average percentage correct.

(The average percentage scores were derived by dividing the total number of correct responses of the 30 subjects by the total possible points.)

- (c) Correct Response Analysis.
- 1 The pre and post-tests were evaluated to determine areas to be strengthened or revised. Each subject's test responses were listed according to the corresponding behavioral objective and criterion measure. See Tables 1 and 2, pages 357-358, for the Correct Response Analysis Pre-test and Post-test.
  - (d) Process Evaluation.
- 1 The process evaluation measured the opinions toward the instructional strategy. The results are as follows: As a result of this learning experience, 21 subjects thought they had misconceptions about Low Back Pain. Nine felt they had no misconceptions. Eighteen subjects thought the learning experience clarified these misconceptions. Three subjects indicated that the misconceptions were somewhat clarified. See Table 3. page 359, for the Tabulation of Process Evaluation Responses.
- 2 Seven subject areas were listed in the Comment Section of the Process Evaluation Form for Low Back Pain. A synopsis of the comments obtained in this section are provided as follows:

a Physical Setting: "Very Nice" "Very Attractive"

b Health Educator: "Did a good job." "Did an excellent job."

especially the T.V." C Audio-Visual Equipment: "I liked your program,

d Patient Education Programs: "Very informative"
"I think it will really help me."

e Paperwork: "Too much of it." "It was alright."

f Patient Learning Concept: "Great idea."

g Other: Most subjects failed to fill in this section of the Process Evaluation.

### (10) Revisions.

(a) The first and second version results of the Low Back Pain Information Pre and Post-test results are shown on the Total Pre and Post Test Scores, Table 4, page 360. The revisions brought second version test scores up to the 80 percent level for 92 percent of the test population.

1 Rationale for the Revision on the Pre and Post-tests.

a The percentage of negative comments about the choice of words in the pre/post-tests necessitated minor revisions to clarify the meaning of the questions for the patients.

#### (11) Physical Therapist Evaluation.

(a) Upon completion of the revisions in the learning strategy, the content consultant (physical therapist) reviewed the entire program and evaluated the content for the target population. See Inclosure 5.

#### (12) Cost Analysis.

(a) The following (See Table 5, page 361) is an analysis of the costs inherent in developing a learning system for Low Back Pain. The costs are listed in three separate categories; 1) hardware (equipment), 2) software (educational materials), and 3) administrative (salaries, reproduction costs, etc.). For further cost information, see Appendix 9, pages 480-482, Current Baseline Information and Cost Analysis.

#### (13) Final Staff Evaluation.

(a) Upon completion of the formative stage of the evaluation, the learning system was evaluated as total package. See Inclosure 8, Final Staff Evaluation Form.

LOW BACK PAIN INFORMATION CORRECT RESPONSE ANALYSIS - PRE-TEST

NUMBER OF INCORRECT RESPONSES *	(67)	1	80	6	010	000	8	7	6	(Ib	0	3	9	(1)	7
RESPONSE ANALYSIS	+	+++++++++++++++++++++++++++++++	-++++++++-++-++++++++++	-+-+++-+++++-+++++++-	++-+-+++++++++++++	-+++-++++++++++++++	-+-+-+++-+-++++++-+++++-	-++++++++++++++++++++++++	-+-+++++++-+++++++++-	+++++-+-++++-++	+++++-+-+-+-+-+-+-+-+-+-	++-+	+-+++	-++	+-+++-+++++++++++++++++++++++++++++++++
CRITERION MEASURES (Incl 3 c)	1	2	3	4		5		9	7	00		6		10	11
BEHAVIORAL OBJECTIVES	1	2	3	3		4		5	9	00		•		11	7&10

INCORRECT RESPONSE

= CORRECT RESPONSE

CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

\*RESULTS TABULATED ON THE PRE-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

# LOW BACK PAIN INFORMATION CORRECT RESPONSE ANALYSIS - POST-TEST

NUMBER OF INCORRECT	RESPONSES *	1	7	1	5	5	9	2	5	7	80	3	5	0	3	0
		+	1	+	+	1	+	+	+	+	+	+	+	+	+	+
		+	+	+	+	+	1	1	1	+	1	+	+	+	+	+
		+	+	+	+	+	1	+	+	+	+	+	+	+	1	+
		+	1	+	+	+	1	+	+	+	+	+	1	+	1	+
		1	1	+	1	1	1	+	1	1	1	+	+	+	+	+
		+	1	+	+	+	+	1	+	+	+	1	+	+	+	+
		+	1	+	+	+	+	+	+	+	+	+	1	+	+	+
		+	+	+	-	+	1	+	+	+	+	+	+	+	+	+
		+	+	+	+	+	1	+	+	+	+	1	+	+	+	+
		+	+	+	+	+	1	+	+	+	1	1	+	+	+	+
		+	+	+	+	+	+	+ .	1	+	1	+	+	+ -	+	+
		+ +	+	+ +	+ -	+ +	+ +	+ +	+ +	+ +	+ -	+ +	+ +	+ +	+ +	+ +
	S	+ +		T	1	+	+	+	+	1	+	+	+	+	+	+
	SI	+	+	+	+		+	+	+	+	+	+	+	+	+	+
	ANALYSIS	+	+	i	+	+	+	+	+	+	+	+	+	+	+	+
	AN	+	+	+	+	+		+	+	+	+	+	+	+	+	+
		+	+	+	+	1	+	+	+	+	+	+	1	+	+	+
	RESPONSE	+	+	+	+	1	+	+	+	+	1	+	+	+	1	+
	Do.	+	+	+	+	+	+	+	+	+	1	+	+	+	+	+
	ES	+	+	+	1	+	1	+	1	+	1	+	+	+	+	+
	04	+	1	4	+	+	+	+	1	+	+	+	+	+	+	+
		+	+	+	1	+	+	+	+	1	+	+	1	+	+	+
		+	1	+	+	+	1	+	+	+	+	+	+	+	+	+
		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		+	+	+	+	+	+	+	+	1	+	+	1	+	+	+
		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		+	+	+	+	+	+	+	+	1	+	+	+	+	+	+
		+	+1	+	+1	+	+1	+1	+	+1	+!	+- !	+	+1	+1	+1
CRITERION	(Incl 3-f)	1	2		3		4	in		9		7	00	6	10	11
BEHAVIORAL OBJECTIVES		1	2		3		3	7		ur)		9	000	o.	11	7610

- = INCORRECT RESPONSE
- CORRECT RESPONSE
- O = CIRCLED AREAS INDICATE MEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRAIEGY

\*RESULTS TABULATED ON THE POST-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

TAPLE A
TABULATION OF PROCESS EVALUATION RESPONSES
LOW BACK PAIN

Item	CONTRACTOR SECURISE		Opinion	-	
Viewing Time	l T	1 2	$\frac{25}{3}$	3 4	0 5
	Too Short	IN	ОК		Too Long
Content Interest	0 1	3 2	12	11	45
	Boring		OK		Fascinating
Questions on Topic	0 1	0 2	16 3	44	10 5
	No Help		OK Really H		eally Helped
Pace	0 1	$\frac{1}{2}$	24	34	<u>2</u> 5
	Too Slow		OK		Too Fast
Content Uniqueness	0 1	$\frac{1}{2}$	$\frac{10}{3}$	15	4 5
	Old Stuff	-	OK		All New
Content Value	0 1	0 2	7/3	11	12 5
	No Value		OK	M	ost Valuable
Learning Lab Technicians Style	0 1	0 2	7/3	10	13 5
	Poor		OK		Excellent
Learning Center	0 1	3 2	4/3	10	13 5
	Poor		OK		Excellent
Preference for Instruction	14	$\frac{3}{2}$	6 3	3 4	4 5
	A/V Mode		Neutral	L	ive Teacher
Freedom to learn by A/V compared to usual		$\frac{3}{2}$	11/3	8 4	7 5
instructions	Less Freed	om	Equal More Freed		
Personal responsi- bilities for learning	0	,	15	я	,
by A/V compared to usual instruction	0 1 . Less	2/2	1 <u>5</u> 3 Equal	8 4	5 5 More
Patient attitude toward A/V modes for	1	1/2	8	9	11 5
health education	Poor		Neutral	4	Excellent
Patient viewing of commercial TV in	4	10	10	3	3
hours during the	<u> </u>	2	3	34	5
day	Less Than		Hours		More Than

80% 100% TABLE 4 28 29 30 Second Version 10 11 12 13 14 15 16 First Version 6 POST-TEST PRE-TEST POSSIBLE 15 14 13 10 0 0 00 9 SUBJECTS 80% 360

LOW BACK PAIN TOTAL PRE & POST IEST SCORES

TABLE 5

LOW BACK PAIN COST ANALYSIS

HARDWARE	DEVELOPMENTAL & INVESTMENT COSTS (Price per Unit)	RECURRENT COST PER 1/2 HOUR
SONY: Video Tape Recorder TV Monitor	Price per unit no longer needs to be added. Initial investment cost was anno- tated under hypertension.	\$0.07 .04
Headphones		.001
Listening Center		.001
Maintenance	For each piece of equip- ment = ½c/Unit ½ Hour	.025
SUB-TOTAL	-0-	\$0.13
SOFTWARE		
PACOMED Script (Advanced Organizer)	-0-	\$0.016
TIME/LIFE : Backache	\$150.00	.01
SUB-TOTAL	\$150.00	\$0.03
TOTAL		\$0.16
ADMINISTRATIVE COSTS		
Developmental	\$230.00	
Typing & Reproduction	80.00	
Paperwork to Individu- alize strategy		\$0.05
SUB-TOTAL	\$310.00	\$0.05
TOTAL	\$460.00	\$0.21

### INCLOSURE 1

Low Back Pain Objectives

### LOW BACK PAIN OBJECTIVES

Upon completion of this learning program the patient will be able to:

- 1. Define good posture.
- 2. Identify who may acquire low back pain.
- 3. Identify the most common cause of low back pain.
- 4. Tell. what part of the spine is affected when you have low back pain.
- 5. Describe why being over weight can cause low back pain.
- 6. Explain that exercise is the only real treatment/cure for low back pain.
- 7. Demonstrate the proper exercises for low back pain.
- 8. Describe the proper method to lift heavy loads, such as, children, groceries, etc.
- 9. Tell how to properly use pillows while sleeping or relaxing.
- 10. Demonstrate good posture.
- 11. Explain how to properly select furniture.

### INCLOSURE 2

Initial Staff Evaluation Form

444

### INITIAL STAFF EVALUATION FORM

SUBJECT Low Back Pain	TITLE Backache
WORKING TIME 18 Minutes	DATE PRODUCED 1975
FORMAT Video Tape	DATE EVALUATED Feb 1976
PRODUCERTime/Life Video	PURCHASE/RENTAL SOURCE Same
PRICE \$150.00  AVAILABILITY: CONTRACT PRODUCER OR COORDI SYNOPSIS Discusses the structure of that cause low back pain. Demonst strengthen the back.	the spine and some of the things
INTENDED AUDIENCE General (Adult - Hi OBJECTIVES Covers behavioral objecti	igh School Age) ives listed in the learning system.
TECHNICAL ASPECTS:  SOUND: POOR FAIR GOOD X PHOTOGRAPHY: POOR FAIR GOOD  SPECIAL STRENGTHS AND/OR WEAKNESSES	EXCELLENT X
COULD THIS FORMAT WORK EFFECTIVELY BY ITSE EXPLAIN: To work effectively the vio	CLF? <u>No</u> deo tape needs the behavioral objective
COULD THIS SUBJECT/FORMAT (PACKAGE) BEST B YES X EXPLAIN:	E USED AS A SUPPLEMENT TO OTHER INSTRUCTION?
DAL MILLI	
POSITION: Instructional Designer	

AHS FORM 15 (PACOMED) 25 Mar 1975

### INCLOSURE 3

Low Back Pain Instructional System Forms

a - g

### PRIVACY ACT STATEMENT (5USC 552a)

Authority for collection of information including Social Security
 Number:

Section 3012, Title 10, US Code.

2. Principal purposes for which information is intended to be used:

To assist medical research personnel in the monitoring of individual patient performance and in evaluation of the PACOMED concept.

The last four digits of the SSN identifies the patient and allows
for computer consolidation, comparison, and retrieval of individual
data, and cross reference with the outpatient record if required.

Routine uses:

This information may be used in research pertaining to the planning and development of a prototype patient and community health staff education module; in the establishment of an objective and behavioral data bank; and in the development of appropriate medical instructional systems. Individual data may be used in analysis and discussion with other AMEDD personnel and consolidated in research reports for general release. No information that identifies any individual patient or physician will be released.

- 4. Providing of this information is voluntary but failure to provide will result in your exclusion from the research project.
- 5. The following forms are currently in use with this statement:

AHS Form Demographic Data: Low Back Pain Pre Test Low Back Pain Information Post Test Low Back Pain Information AHS Form Demographic, Baseline Data, & Test Scores: Low Back Pain AHS Form Process Evaluation: Low Back Pain AHS Form One Month Follow-up Data: Low Back Pain Rotter's I.E. Scale Scale Nelson-Denny Reading Scale Scale

Demographic Data: Low Back Pain

INSTRUCTIONS: Please answer each item by supplying the correct information. If you have any questions, do not hesitate to ask the health educator.
NAME:
ADDRESS: (City) (State) (Zip)
(Street) (City) (State) (Zip)
TELEPHONE NUMBERS: Home Work
1. Last four digits of sponsor's SSAN:
2. Date
3. Patient's status: (Circle one of the following)
Service Member Dependent
4. Sponsor's Rank/Status/
5. Sex:
6. Age last birthday:
7. Occupation:
8. Marital status: Married: Single: Divorced:
Widowed: Engaged: Separated:
9. Education completed:
Elementary School High School Baccalaurate
(1st - 6th grade) (9th - 12th grade) Degree
Junior High School 1-3 Yrs College Master's Degree
(7th - 8th grade)  Doctor's Degree
PLEASE TURN THE PAGE

10.	How	long	have	you	had	low b	back pain?	
						Less	than 1 mo.	2 1304
						4 to	6 mos.	ve l
						More	than 1 yr.	23 <u>8 (17</u> 84)
						Chron	ic condition	elon eval n <u>jejm</u> ne

Demographic Data: Low Back Pain

### Low Back Pain Information Pre-test

-		-10 1001						
INSTRUCTIONS:		Read each statement carefully. The statements listed may have more than one correct answer and in some statements, all answers may be correct. Decide which choice or choices best answers that statement. Mark an "X" on the line or lines in front of your answer(s).						
EXA	AMPLE:	Boston is the capital of:						
		Connecticut X Massachusetts Vermont						
1.	What part pain?	of the back is most commonly affected when you have back						
	Low	er Back Middle Back Upper Back						
2.	Low back p	ain is a problem that can affect:						
	the	old. the middle aged. the young.						
3.	If you thi	nk you are developing a back problem you should:						
	See	a doctor and get a complete physical examination.						
	Star	t a rigorous exercise program.						
		it easy and see if it will go away by being more careful the kind of work you do.						
4.	If you have	e low back pain, the best way to overcome it is through:						
	Heat	treatment and massage.						
	Media	cations that will fortify the weakened areas of your back.						
	The second secon	gular exercise program to strengthen the weakened areas of back.						

Lov	W Back Pain Information
5.	Which of the following are Don'ts in regard to your back?
	Walking in high heels.
	Lifting heavy objects from a bending position.
	Lifting heavy objects with your legs rather than your back.
	Slouching in a chair to get more comfortable.
6.	A weight problem will:
	Not affect your posture. Only make a bad posture worse
	Affect your posture. but will not affect the person who has a good posture from the start.
7.	When sleeping on your side, you should place a pillow:
	Under your head with your knees pulled up.
	Under your head and knees.
	Under your head and hips.
8.	The most common cause(s) of low back pain are:
	A slipped disc Nervousness or tension.
	Muscle spasm.
9.	When seated in a chair, your knees should be:
	Level with or slightly lower than your hips.
	Level with or slightly higher than your hips.
	None of the above.
10.	When bending from the waist to lift heavy objects, the actual weight

10 times, \_\_\_\_ 15 times, \_\_\_\_ 20 times, the actual load you are lifting.

placed on the back is:

### LOW BACK PAIN OBJECTIVES

Upon completion of this learning program the patient will be able to:

- . Define good posture.
- . Identify who may acquire low back pain.
- . Identify the most common cause of low back pain.
- . Tell what part of the spine is affected when you have low back pain.
- . Describe why being over weight can cause low back pain.
- . Explain that exercise is the only real treatment/cure for low back pain.
- . Demonstrate the proper exercises for low back pain.
- . Describe the proper method to lift heavy loads, such as, children, groceries, etc.
- . Tell how to properly use pillows while sleeping or relaxing.
- . Demonstrate good posture.
- . Explain how to properly select furniture.

Education Intervention: Backache Information

### Low Back Pain Information

_		Post-test	
INS	STRUCTIONS:	Read each statement carefully. The statements listed may have more than one correct answer and in some statements, all answers may be correct. Decide which choice or choices best answers that statement. Mark an "X" on the line or lines in front of your answer(s).	
EXA	MPLE:	Boston is the capital of:	
		Connecticut X Massachusetts Vermont	
1.		ng from the waist to lift heavy objects, the actual weight the back is:	
	10 ti	mes, 15 times, 20 times, the actual load you are	
2.	When seate	d in a chair, your knees should be:	U
	Leve	l with or slightly lower than your hips.	
	Leve	l with or slightly higher than your hips.	
	None	of the above.	
3.	The most c	ommon cause(s) of low back pain are:	
	A sl	ipped disc. Muscle spasm. Nervousness or tension.	3
4.	When sleep	ing on your side, you should place a pillow:	,
	Under	your head with your knees pulled up.	
	Under	your head and knees.	*
	Under	your head and hips.	
5.	A weight p	roblem will:	
	Not a	ffect your posture. Only make a bad posture worse	
	Affec	but will not affect the person who has a good posture from the start.	0

# Low Back Pain Information

6.	Which of the following are things you should not do in regard to your back?
	Walking in high heels.
	Lifting heavy objects from a bending position.
	Lifting heavy objects with your legs rather than your back.
	Slouching in a chair to get more comfortable.
7.	If you have low back pain, the best way to overcome it is through:
	Heat treatment and massage.
	Medications that will fortify the weakened areas of your back.
	A regular exercise program to strengthen the weakened areas of your back.
8.	If you think you are developing a back problem you should:
	See a doctor and get a complete physical examination.
	Start a rigorous exercise program.
	Take it easy and see if it will go away by being more careful about the kind of work you do.
9.	Low back pain is a problem that can affect:
	the old the middle aged the young.
LO.	What part of the back is most commonly affected when you have back pain?
	The Lower Back The Middle Back The Upper Back.

### Low Back Pain Information

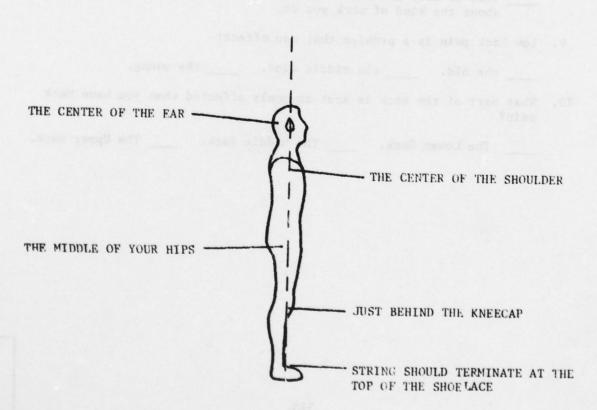
INSTRUCTIONS:

The Health Educator will have the patient demonstrate proper posture by asking the patient to stand "normally" by a string suspended from a door or a wall. The Health Educator will assess the patient's posture by noting where the string passes through the physical plane of the body. The Health Educator should make on the spot corrections. Circle deficient areas on the diagram provided.

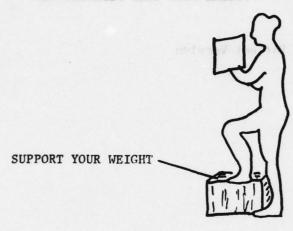
EXAMPLE:

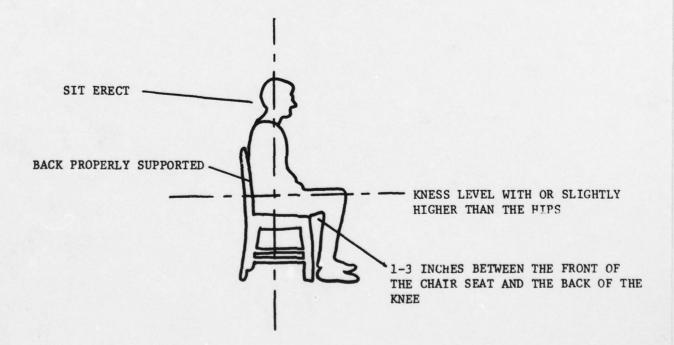
"Mrs. Smith, the string should pass through the center of your ear. Can you hold your head up a little higher?"

TO HAVE CORRECT POSTURE, ALL OF THE FOLLOWING INDICATED AREAS MUST BE CORRECT. THE STRING SHOULD PASS THROUGH:



NEVER REACH ABOVE YOUR HEAD, IF YOU MUST, BE SURE TO SUPPORT YOUR WEIGHT AND SLIGHTLY BEND YOUR KNEES.





### THOUSEN WHOY TROUBLE OF HAUS INCLOSURE 4 , SAFE RUBY SYOUL HOARS SIVEN

Formative Evaluation: Patient Version

#### FORMATIVE EVALUATION: PATIENT VERSION

- 1.	Date:
2.	Patient's Name:
3.	Age:
4.	Social Security Number:
5.	Race or Ethnicity:
6.	Sex:
7.	Education. Completed:
8.	Occupation:
9.	Program Title:
10.	Evaluator:

Instructions: This form is to be filled out in a personal interview with the patient as the patient works the program. The interviewer should make a special effort to put the patient at ease and explain that we are testing the program, NOT THE PATIENT. The results of these tests will be kept private and will only be seen by those concerned with this project.

#### OPERATIONAL DEFINITIONS:

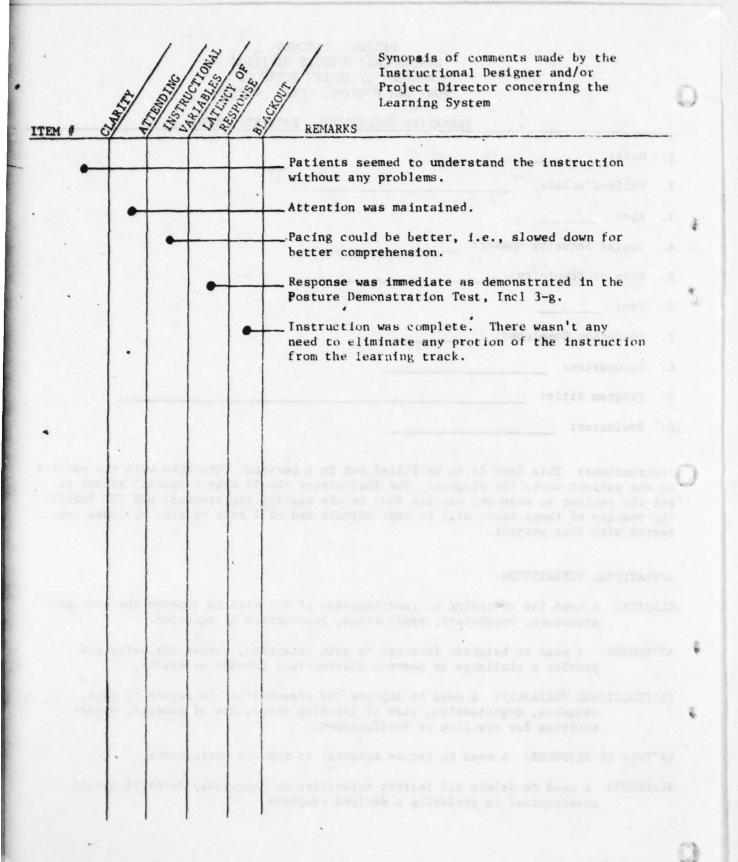
CLARITY: A need for rewording or rearrangement of material to improve the sentence structure, vocabulary, explanation, instruction or question.

ATTENDING: A need to heighten interest to gain attention, arouse curiosity and provide a challenge to learner distraction, boredom or apathy.

INSTRUCTIONAL VARIABLES: A need to improve the presentation in regard to pace, sequence, organization, size of learning steps, use of prompts, opportunities for practice or reinforcement.

LATENCY OF RESPONSE: A need to revise material to improve performance.

BLACKOUT: A need to delete all learner activities or expository material deemed nonessential in producing a desired response.



### INCLOSURE 5

Physical Therapist Evaluation Form

PHYSICIAN/NURSE	CLINICIAN EVA	ALUATION FORM	
DATE 24 May 76	FORMAT _		
EVALUATOR Colores the de	TITLE _	Lace Perc	
IS THE SUBJECT COVERED COMPLETELY?	I Therapist		
WHAT WOULD YOU ADD?			
(woung kips who is show don't and account on the standard on t	har grap.	· de ou reje stere er	
IS THE CONTENT ORGANIZED PROPERLY?  IF NOT, HOW WOULD YOU CHANGE THE SEQUENCE?	•		C
ARE ALL THE CRUCIAL OBJECTIVES EMPHASIZED? (BEHAVIORS OR KNOWLEDGE THE SAMEENT MUST M WITH HIS DISEASE OR PROBLEM.) IF NOT, PLEASE ELABORATE.	ASTER IN ORDE	ER TO COPE AND LIVE EFFECTI	VELY

ARE FAMILIAR SYMBOLS AND CONCEPTS USED TO HELP EXPLAIN UNFAMILIAR SUBJECT MATTER?

FOR WHAT PATIENT POPULATION WOULD YOU RECOMMEND THIS PRESENTATION?

For general education to interest people in learning good posture and publishers resulting from poor posture.

DO YOU FEEL THE PRESENTATION IS TOO LONG, TOO SHORT AND WHY?

ACADEMY OF HEALTH SCIENCES (ARMY) FORT SAM HOUSTON TX--ETC F/G 6/5
STRATEGY FOR INSTRUCTIONAL SYSTEMS DESIGN AND FORMATIVE EVALUAT--ETC(U) AD-A070 921 JUL 76 D H KUCHA UNCLASSIFIED HCSD-79-001-B NL 5 of 7 AD A070921 C highlac.

#### INCLOSURE 6

Final Staff Evaluation Form

### FINAL STAFF EVALUATION FORM

SUBJECT: Lo	w Back Pain	TITLE: Backache	o and the same of
WORKING TIME	: 18 Minutes	DATE PRODUCED: 19	75
FORMAT: Vid	ео Таре	DATE EVALUATED: _A	pril 1976
PRODUCER: T	IME/LIFE Video Corpora	tion, NY, NY	
PRICE: See Table	Cost Analysis,	INTENDED AUDIFNCE:	General (Adult/High School
ba tl	Iscusses the structure ack pain. Demonstrates ne back. Lists some of ng, bending, and sittir	s six (6) basic exercise f the "do's and don'ts	ses to strengthen
was not a con	objectives.  GTHS AND WEAKNESSES:  uplete learning system.	It became necessary	sed for testing, to develop the
following mat	erials to supplement to phic Data Form, Pre-te	he learning system: I	Privacy Act State-
Proper Postu		out, behavioral confeet.	1001 1001
DEFINITION OF	SELF-INSTRUCTIONAL FE	EATURES	
PRE-TEST:		at the beginning of the bject entry level (priented.	
OBJECTIVES:	Description of what completion of the le	the subject will be absarning system.	ele to do upon
PRACTICE:	Questions or tasks i	n the instructional sy	stem similar to

PLEASE TURN PAGE

patient (Interview comments.)

POST-TEST:

FEEDBACK:

information.

Questions or tasks at the conclusion of the instructional

system which prove the subject has learned the intended

Initial reactions to the instructional system by the

ATTITUDE SCALES: Measures feelings, emotions, or attitudes toward the instructional strategy, it's contents and concepts.

Self-Instructional Features	1st Version	2nd Version
Pre-test	1 of 15 passed.	10 of 15 passed.
Objectives	See Behavioral Objectiv	es
Practice	See Instructional Syste	m
Post-test	10 of 15 passed.	13 of 15 passed.
Feedback .	See Formative Evaluation	n sauthment stat
Attitude Scale	See Process Evaluation	
TECHNICAL ASPECTS:	wordsing want made out of these	OVER DIE ENGREECE IN
	Poor Fair Good Excellen	t invest e le jone e a re-
Sound:		
Photography:	~	

MATRIX FOR FIELD IMPLEMENTATION

TITLE: Low Back Pain

.

TRACK	PRODUCER	COPYRIGHT	PHOTOGRAPHY	SOUND	SCRIPT	RECOMMENDATIONS
Backache	Time/Life Video	N/A	N/A	N/A	N/A	Purchase the video-tape and use as it is now produced.

### APPENDIX 8

0

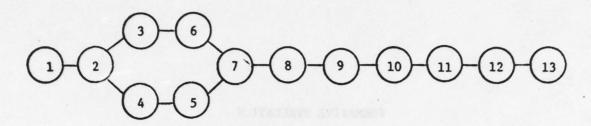
#### FORMATIVE EVALUATION

Child Growth and Development

Birth to Three Years of Age



### SUMMARY NETWORK OF INSTRUCTIONAL DESIGN FOR CHILD GROWTH AND DEVELOPMENT



### EVENT IDENTIFICATION

- 1. Topic Selected: Child Growth and Development
- 2. Met with Content Consultant, p. 391.
- 3. Develop Behavioral Objectives, p. 391.
- 4. Conduct "Real World" Search for Existing Educational Software on Child Growth and Development, p. 391.
  - 5. Evaluate Existing Educational Software, p. 391.
  - 6. Write Criterion Measures (Pre-test Post-test), Incl 3-c,f,g,j,k & n.
  - 7. Design Instructional System. (See Instructional System for Child Growth and Development, Incl 3-a thru n.)
  - Conduct Formative Evaluation. (See Patient Evaluation Form & Interview Comment Sheet, Incls 4 & 5.)
  - 9. Data Collection, p. 393.
  - 10. Revisions, p. 395.
  - 11. Conduct Physician Evaluation, Incl 7.
  - 12. Cost Analysis, p.396 and Table 11, p. 407.
  - 13. Final Staff Evaluation. (See Incl 8.)

#### 1. INTRODUCTION.

a. The following is a chronological representation of the systems approach to instructional design after the topic selection was made. Each event, as it appears in the Summary Network of the Instructional Design (page 390), will be discussed in detail (Refer to corresponding numbers in the summary.) to give the proper perspective of the total developmental process.

### (2) Initial Contact With the Content Consultant.

(a) On 17 March 1976, the Instructional Designer met with the Content Consultant to outline the behavioral objectives for the instructional learning system on Child Growth and Development.

### (3) Behavioral Objectives.

(a) The Child Growth and Development objectives are statements of tasks that the patient will be able to perform upon successful completion of the learning system. The behavioral objectives are listed in three separate sections: Birth to Year Che, One to Two Years, and Two to Three Years. See Inclosure 1, page 408, for a list of these objectives.

### (4) "Real World" Search.

(a) There was a great deal of educational software to be evaluated in the area of Child Growth and Development, although produced by one firm, Parent Magazine, Inc. See Inclosure 2 for source and Initial Staff Evaluation Forms.

#### (5) Existing Educational Software Evaluation.

(a) Evaluation of the existing educational software was conducted on 28 programs produced by Parent Magazine, Inc. Only one of these programs (See Birth to Five, Inclosure 2, for the Initial Staff Evaluation Form) met the behavioral objective requirements necessary for this program.

### (6) Criterion Measures.

(a) The criterion measures were written to determine the patient's entry level, (pre-test score), to insure that the instructor taught the objectives (tasks the patient must master), and that the instructional system was effective (minimum of 80 percent competency level). See Inclosure 3.

### (7) Child Growth and Development Instructional System.

(a) The following is a list of the forms necessary to administer the instructional strategy for Child Growth and Development. These forms represent the paperwork actually encountered by each patient when s/he was given the learning system. Each form, including the learning tracks, falls in the proper order of sequence. See Inclosure 3, a-n.

a) Privacy Act Statement

b) Demographic Data: Child Growth and Development

- c) Child Growth and Development Information: From Birth to Year One (Pre-test)
- d) Child Growth and Development Objectives: From Birth to Year One
- e) Educational Intervention: Child Growth and Development "From Birth to One"
- f) Child Growth and Development Information: From Birth to Year One (Post-test)
- g) Child Growth and Development Information: Year One to Year Two (Pre-test)
  - h) Child Growth and Development Objectives: Year One to
- Year Two

  i) Educational Intervention: Child Growth and Development
  "One to Two Years"
- j) Child Growth and Development Information: Year One to Year Two (Post-test)
- k) Child Growth and Development Information: Year Two to Year Three (Pre-test)
- 1) Child Growth and Development Objectives: Year Two to Year Three
- m) Educational Intervention: Child Growth and Development "Two to Three Years"
- n) Child Growth and Development Information: Year Two to Year Three (Post-test)

#### (8) Formative Evaluation.

- (a) During the formative evaluation stage for Child Growth and Development, the system was tested on a combination of subjects from the Nursing Staff, non-professional MEDDAC personnel, and military dependents. The Project Director and/or Instructional Designer was present for each instructional session to evaluate the patient's reaction to the learning system. If the patient encountered learning problems during the presentation of the learning strategy, the difficulties were noted on the Formative Evaluation: Patient Version Form (See Inclosure 4), so that necessary revisions could be made.
- (b) At the conclusion of the learning session, each patient was interviewed to obtain comments concerning his/her personal feelings about the program. Information is provided as follows:
- What were the most difficult parts of the lesson?
   Patients commented that the instruction was not difficult.
- 2 What was the best feature of the lesson?
  A majority of the patients commented that much of the material was new for them and thus the whole program was the "best feature".
  - What was the worst feature of the lesson? No comments made.

(9) Data Collection.

The following is a compilation of demographic, test (prepost), and process evaluation data.

#### (a) Demographic Data.

2

<u>1</u> A total of 30 individuals were subjects for the formative evaluation stage of Child Growth and Development. These individuals were comprised of a cross section of subjects from the Nursing Staff, non-professional MEDDAC personnel, and military dependents.

2 Source Breakdown: There were 10 active duty, six dependents, and 14 civilian employees used as subjects.

3 Sex Breakdown: This evaluation was comprised of six male patients and 24 female patients.

4 Age Breakdown: Twelve patients were in the 15-25 year age group, 15 from 26-35 years of age, two from 36-45 years of age, and one from 46-55 years of age.

5 Occupation Breakdown: The occupation data is as follows: one retired, three housewives, two non-medical professionals, 10 students, two blue collar workers, and 12 medical professionals.

6 Marital Status: The marital status information is as follows: 23 married, four single, two engaged, and one separated patient.

7 Educational Level Data: Five patients had a 9th-12th grade education, six patients had attended 1-3 years of college, 16 patients had obtained a Baccalaureate Degree, and three had obtained a Master's Degree.

8 Number of Children Data: Information provided as follows:

 Number of Patients
 Number of Children

 5
 1

 8
 2

 2
 3

 1
 4

 1
 5

There were 13 expectant patients included in the subject population.

(b) Pre and Post-test Data Collection: The following are the results of the three pre/post-test series.

1 From Birth To One: 25 Possible Points.

<u>a</u> Pre-test Score Range: Of the 30 participants, the highest number of correct responses was 23 and the lowest number of correct responses was one.

- b Post-test Score Range: The highest number of correct responses was 25 and the lowest number of correct responses was 17.
- c Total Scores -- Pre-test: 440 correct responses out of 750 possible points = 59 percent, the average percentage correct.
- d Total Scores -- Post-test: 628 correct responses out of 750 possible points = 84 percent, the average percentage correct.
  - 2 From One to Two: 18 Possible Points.
- a Pre-test Score Range: Of the 30 participants, the highest number of correct responses was 17 and the lowest number of correct responses was nine.
- b Post-test Score Range: The highest number of correct responses was 18 and the lowest number of correct responses was 13.
- <u>c</u> Total Scores Pre-test: 387 correct responses out of 540 possible points = 72 percent, the average percentage correct.
- d Total Scores Post-test: 484 correct responses out of 540 possible points = 90 percent, the average percentage correct.
  - 3 From Two to Three: 10 Possible Points.
- a Pre-test Score Range: Of the 30 participants, the highest number of correct responses was nine and the lowest number of correct responses was three.
- $\underline{b}$  Post-test Score Range: The highest number of correct responses was 10 and the lowest number of correct responses was seven.
- c Total Scores -- Pre-test: 181 correct responses out of 300 possible points = 60 percent, the average percentage correct.
- d Total Scores -- Post-test: 274 correct responses out of 300 possible points = 91 percent, the average percentage correct.
- (The average percentage scores were derived by dividing the total number of correct responses of the 30 subjects by the total possible points.)
  - (c) Correct Response Analysis.
- 1 The pre and post-tests were evaluated to determine areas to be strengthened or revised. Each subject's test responses were listed according to the corresponding behavioral objective and criterion measure. See Tables 1-6, pages 397-402, for the Correct Response Analysis Pre-test and Post-test.

#### (d) Process Evaluation.

1 The process evaluation measured the opinions toward the instructional strategy. The results are as follows: As a result of this learning experience, 17 subjects though they had misconceptions about Child Growth and Development. Thirteen felt they had no misconceptions. Thirteen subjects thought the learning experience clarified these misconceptions, one subject felt that the misconceptions were not adequately clarified, and three subjects indicated that the misconceptions were somewhat clarified. See Table 7, page 403, for the Tabulation of Process Evaluation Responses.

2 Seven subject areas were listed in the Comment Section of the Process Evaluation Form for Child Growth and Development. A synopsis of the comments obtained in this section are provided as follows:

a Physical Setting: "Very nice." "Very good."

b Health Educator: "Excellent." "Very good."

"Most helpful."

c Audio-Visual Equipment: "Good."

d Patient Education Programs: "I enjoyed them."

"Good." "Very helpful."

e Paperwork: Most subjects failed to fill in

this section of the Process Evaluation.

"Should be more of it."  $\frac{f}{}$  Patient Learning Concept: "Excellent idea."

g Other: Most subjects failed to fill in this sections of the Process Evaluation.

#### (10) Revisions.

(a) The first and second version results of the Child Growth and Development Information (Birth to One, One to Two, and Two to Three) Pre and Post-test results are shown on the Total Pre and Post-test Scores, Tables 8-10, pages 404-406. The revisions brought second version test scores up to the 80 percent level for 93 percent of the test population.

1 Rationale for the Revision on the Pre and Post-tests.

a The percentage of negative comments concerning the choice of words in the pre and post-test (first version) necessitated minor revisions to clarify the meaning of the questions for the patients.

b The sound track music acted as a built-in inhibitor to subject concentration; therefore, the sound track was changed to something more subdued.

#### (11) Physician Evaluation.

(a) Upon completion of the revisions in the learning strategy, the content consultant (physician) reviewed the entire program and evaluated the content for the target population. See Inclosure 5.

#### (12) Cost Analysis.

(a) The following (See Table 11, page 407) is an analysis of the costs inherent in developing a learning system for Child Growth and Development. The costs are listed in three separate categories; 1) hardware (equipment), 2) software (educational materials), and 3) administrative (salaries, reproduction costs, etc.). For further cost information, see Appendix 9, pages 483-485, Current Baseline Information and Cost Analysis.

#### (13) Final Staff Evaluation.

(a) Upon completion of the formative stage of the evaluation, the learning system was evaluated as a total package. See Inclosure 6, Final Staff Evaluation Form.

CHILD GROWTH AND DEVELOPMENT INFORMATION: BIRTH TO ONE CORRECT RESPONSE ANALYSIS - PRE-TEST

NUMBER OF INCORRECT	RESPONSES *	9	8	9	9	5	3	7	9	0	0	, ,	8	)-	7	5	6	6	ω(	θ	9	7	3	80	<b>a</b>	)
	RESPONSE ANALYSIS	++++++++++++++++++++++++++++++++	++-+++++-+-+-+	+-+++-+-+-+-+-+-++-	+-++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++	-++++++++++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++++++++++	++++-+++++++++++-+-+-+-+-+-	++-+++++++-+-+-+-+-+-	+ + + + + + + + + + + + + + + - +	+++++++++++++++++++++++++++++++++++++++	-++	++++++++++++	+++++++++++++++++++++++++++++++++++++++	++++++-+++++++++-+++	-++-+++-+++++++++++++	++++-++++++++-++-+++-	+ - + + - + + + + + + + + + + - + + + +	+++++++++	+++++++++	+++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++++++++++	++++++-++++-+-+-+-+++++++	+++++++++++++	
CRITERION	(Incl 3-c)	1	2	3	4		5	9	7	00			6	10	11	12	13	14			15	16	17			
BEHAVIORAL		1	2	3	4		2	9	7	2			80	6	10	11	12	13			14	14	15			

- = INCORRECT RESPONSE

+ = CORRECT RESPONSE

➡ CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY \*RESULTS TABULATED ON THE PRE-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

TABLE 2

NUMBER OF INCORRECT RESPONSES *	2	3	7	0	00	1	9	80	3	0	2	1	000	7	00	9	0	3	3	7	2	7	2	2
RESPONSE ANALYSIS	+++++++++++++++++++++++++++++++++	++++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++	++++++++++++++++++++++++++++++++	++-++++++++++++++++++++++	+++++++++++++++++++++++++++++	++-++++++++++++++++++++++++++	-+-++-+-+++++++++++++++++++	+++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++++++++++	++++++++++++++++++++++++++++++	++++++++++++++++++++++++++++++	-++++-++++++++++++++++++++++++	-+-+++++++++++++-++++-+-+-	++-+++++++++++++	+++++-+++++++-+-+-+-+	+++++++++++++++++++++++++++++	++++++++++++-+-++++++++++	++++++++++++++++++++++++++++	++-++++++++++++++++++++++	+++++++++++++++++++++++++	++++++++++++++++++++++++++	+++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++
CRITERION MEASURES (Incl 3-f	1			2	67	7			'n	9	7	00	6	10			11	12	13	14		15	16	17
BEHAVIORAL OBJECTIVES	1			2	2	67			7	50	10	9	7	00			0	10	11	12		13	14	15

CHILD GROWTH AND DEVELOPMENT INFORMATION: BIRTH TO ONE

CORRECT RESPONSE ANALYSIS - POST-TEST

- = INCORRECT RESPONSE

+ = CORRECT RESPONSE

O = CIRCLED AREAS INDICATE NEED FOR MORE REINFORGEMENT IN THE INSTRUCTIONAL STRATEGY \*RESULTS TABULATED ON THE POST-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WFRE REVISED. NO REVISIONS WERE NECESSARY ON THE POST-TRST,

CHILD GROWTH AND DEVELOPMENT INFORMATION: ONE TO TWO CORRECT RESPONSE ANALYSIS - PRE-TEST

4

40

NUMBER OF INCORRECT	RESPONSES *	0	5	5	2	2	3	5	1		1	5	(5)	1	( <del>S</del> )	∞(	9	0	8
		+	+	+	+	++	+	+	++	1	+	++	+	++	1	++	+	++	+
		+	+++	+++	+	+	+	1	+	+++	+ + +	+	1	+			1	+	+
		+		+	+	+	++++	+	+	+		+	1	+	1	1	1	+	+
		+	+	+	+	+		+	+	1	+	+	+	!	1	+	!	1	+
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		+	+	+	+	+	+	+	+	+	+	+	1	+	+	+	+	+	1
		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	SI	+	+	+	+	+	+	+	+	+	+	+	1	+	+	+	+	1	+
	LY	+	+	1	+	+	+	+	+	1	+	+	1	+	1	1	+	+	+
	NA	+	+	+	+	+	+	+	+	+	+	+	1	+	+	1	!	!	+
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	ES	+	i	+	+	+	i	+	+	i	+	+	+	1	+	+	1		+
	M	+	+	+	+	+	+	+	+	+	+	+	1		1	1	+	++	+
		+	+	1	+	1	+	+	+	+	1	+	+	+	+	+	+	+	+
		+	+	+	+	+	+	+	+	1	+	++	+	+	1	+	1	+	1
		+	+	+	+	+	+	+	+	1	+	1	1	+	1	+	+	1	+
		+	+	+	+	+	+	+	+	1	+	+	1	1	1	+	+	+	+
		+	+	+	+	+	+	+	+	+	+	+	1	+	1	+	1	+	1
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CRITER	(Incl										1	1	1				1		1
BEHAVIORAL OBJECTIVES	SVERES	1	2	3	4	2	9	7	8	6	10	11	12				13		14

- = INCORRECT RESPONSES

+ = CORRECT RESPONSES

◆ = CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

\*RESULTS TABULATED ON THE PRE-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

TABLE 4

CHILD GROWTH AND DEVELOPMENT INFORMATION: ONE TO TWO CORRECT RESPONSE ANALYSIS - POST-TEST

NUMBER OF INCORRECT	RESPONSES*	6 4	0 5	1	0 0	0 -	1	0	$\frac{1}{1}$	1
RESPONSE ANALVETS	+ + + + + + + + + + + + + + + + + + + +	+ + + -	+ + + + + + + + + + + + + + + + + + + +	-	+++++++++++++++++++++++++++++++++++++++	+ + + + + + + + + +	<del>+++++++++++++++++++++++++++++++++++++</del>	+++++++++++++++++++	+ + + + + + + + + + + + + + + + + + + +	+++++++++++++++++++++++++++++++++++++++
CRITERION MEASURES (Incl 3-1)	1 2	က		4 m	101	~ <b>6</b> 0 (	10	11	13	14
BEHAVIORAL OBJECTIVES	1 2	8		4 %	101	~ ∞ 0	10	11	13	<b>1</b> 4

- = INCORRECT RESPONSES

+ = CORRECT RESPONSES

C = CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

\*RESULTS TABULATED ON THE POST-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

CHILD GROWTH AND DEVELOPMENT INFORMATION: TWO TO THREE CORRECT RESPONSE ANALYSIS - PRE-TEST

NUMBER OF INCORRECT	RESPONSES*	9	63	-		1		1	2	3	33	
PPCPONCE ANALVETE	C101701070707070707070707070707070707070		- 1	+++++++++++++++++++++++++++++		* * * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * * *	1	++++++++++++++++++++++++++++++	+++++++++++++	++++++	
CRITERION MEASURES (Incl 3-k)	1	,	1 6	,	4 1	ς·	91		,	c	ю	
BEHAVIORAL OBJECTIVES	1	1	, ,	4 6	,	7 1	^ `	01	,	a	0	

- = INCORRECT RESPONSE

+ = CORRECT RESPONSE

O = CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

\*RESULTS TABULATED ON THE PRE-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

CHILD GROWTH AND DEVELOPMENT INFORMATION: TWO TO THREE CORRECT RESPONSE ANALYSIS - POST-TEST

NUMBER OF INCORRECT RESPONSES*	3	1	2	(A)	0	0	1	0	2	0
RESPONSE ANALYSIS	++++++++++++++++++++++++++++++++	+++-++++++++++++++++++++++++++	+++++++++++++++++++	++-+++-+-+-+-	++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++	+-+++++++++++++++++++++++++++++	++++++++++++++++++++++++++++++	+++++-+++++++++++++++++++++++++	++++++++++++++++++++++++++++++
CRITERION MEASURES (Incl 3-n)	1	2			en	4	'n	9	_	00
BEHAVIORAL OBJECTIVES	1	2			3	4	2	9 1	-	xo

# - = INCORRECT RESPONSE

# + = CORRECT RESPONSE

CIRCLED AREAS INDICATE NEED FOR MORE REINFORCEMENT IN THE INSTRUCTIONAL STRATEGY

\* RESULIS TABULATED ON THE POST-TEST INDICATED AREAS THAT NEEDED SPECIAL REVISION IN THE LEARNING STRATEGY. THE CRITERION MEASURES THAT HAD MORE THAN TEN INCORRECT RESPONSES WERE REVISED.

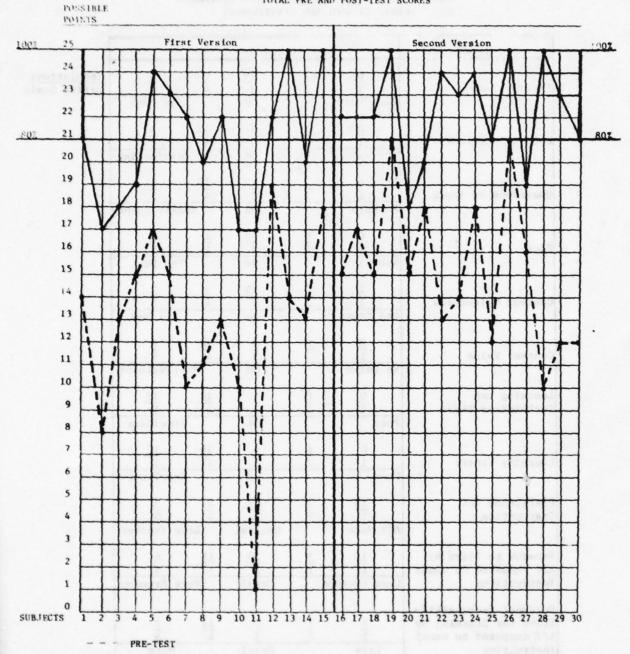
TABLE /
TABULATION OF PROCESS EVALUATION RESPONSES
CHILD GROWTH AND DEVELOPMENT

Tabulations Rating Scale

It em			pluton		
	0	1	<del>29</del> <del>3</del>	04	0
Viewlog Time	1	2		4	5
	Too Short		OK		Too Long
	0	1	q	17	3
Contest laterest	1	2	3	4	5
	Boring		OK		Fasc inat ing
	0	$\frac{2}{2}$	13	10	5
Questions on Topic	1	2	the same of the sa		5
	No Help		OK	R	eally Helpe
	0	$\frac{0}{2}$	26	44	0
Pace	1	2		4	5
	Too Slow		OK		Too Fast
	1	6	19	2 4	2
Content Uniqueness	1	2		4	5
	Old Stuff		OK		All New
	0	$\frac{0}{2}$	9 3	14	7
Content Value	1	2			5
	No Value		ок	M	ost Valuabl
Learning Lab	0	$\frac{0}{2}$	5 3	13	12
Technicians Style	1	2	3	4	5
	Poor		ОК		Excellent
	0	1	4	10	15
Learning Center	1	$\frac{1}{2}$	4/3	4	5
	Poor		OK		Excellent
Preference for	10	3	12	2 4	3
Instruction	1	$\frac{3}{2}$	3		5
	A/V Mode		Neutral	L	ive Teacher
Freedom to learn by	1	3	10	10	6
A/V compared to usual	1	2	3	4	5
instructions	Less Freed	om	Equa 1	M	ore Freedon
Personal responsibil-					
ities for learning by	2	1 2	$\frac{9}{3}$	11	7
A/V compared to usual	1	2		4	the same of the sa
instruction	Less		Equa 1		More
Patient attitude	0	0 2	8	13	9
toward A/V modes for	1	2	3	4	5
health education	Poor		Neutral		Excellent
Patient viewing of	8	8 2	7	4	3
commercial TV in hours	1	2	3	4	5
during the day	Less Than		Hours		More Than

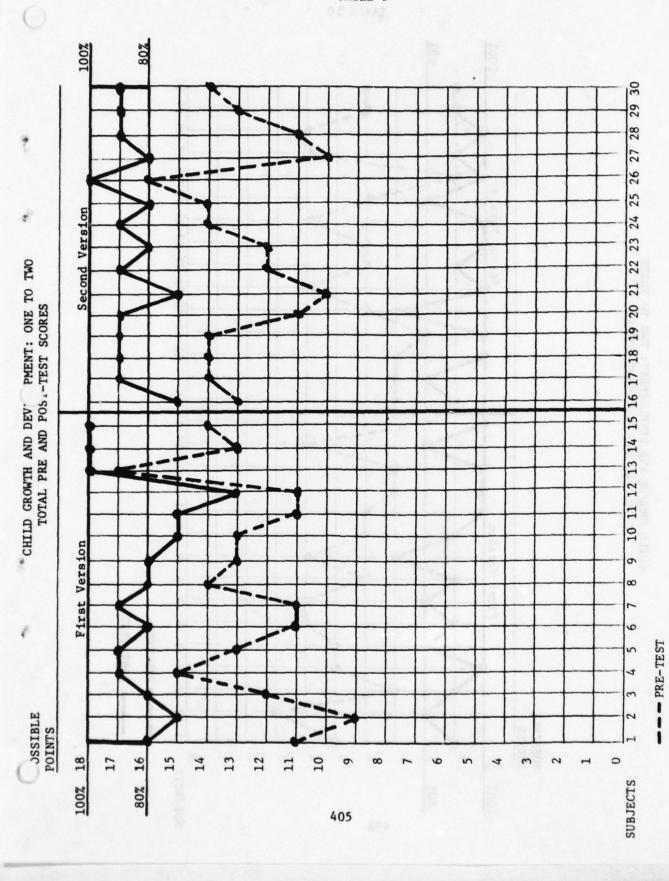
TABLE 8

CHILD GROWTH AND DEVELOPMENT: BYRTH TO ONE TOTAL PRE AND POST-TEST SCORES



POST-TEST

TABLE 9



- POST-TEST

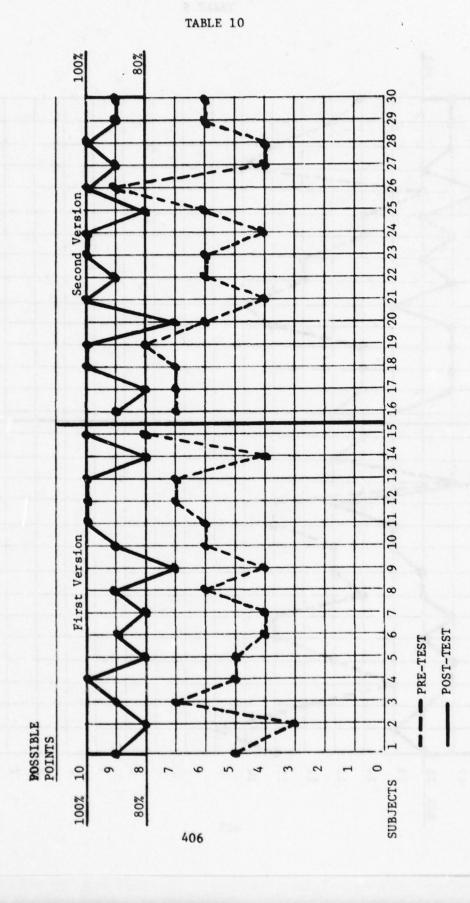


TABLE 11
CHILD GROWTH AND DEVELOPMENT COST ANALYSIS

HARDWARE	DEVELOPMENTAL AND INVESTMENT COSTS (Price per Unit)	RECURRENT COST PER HOUR
SONY: Video Tape Recorder TV Monitor	Price per unit no longer needs to be added. Initial investment cost was anno-	\$0.15 .08
	tated under hypertension.	804
Headphones	CHIED CROSS & DEVELOPMENT OF	.002
Listening Center		.002
Maintenance	For each piece of equip- ment = 1¢/Unit Hour	.04
SUB-TOTAL	-0-	\$0.27
SOFTWARE	*	
PACOMED Script (Advanced Organizer)	-0-	\$0.03
PARENTS MAGAZINE + PACOMED Birth to One One to Two Two to Three	\$250.00	.04
SUB-TOTAL	\$250.00	\$0.07
TOTAL		\$0.34
ADMINISTRATIVE COSTS		
Developmental	\$236.00	
Typing & Reproduction	120.00	
Paperwork to Individualize Strategy		\$0.06
SUB-TOTAL	\$383.00	\$0.06
TOTAL	\$633.00	\$0.40

INCLOSURE 1 CHILD GROWTH & DEVELOPMENT OBJECTIVES a - c 86.27 ..

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#### CHILD GROWTH & DEVELOPMENT OBJECTIVES : BIRTH TO YEAR ONE

- 1. State the number of feedings a child (newborn to six months old) may be expected to eat daily.
- 2. State at what age an infant's eyes should already be focusing.
- 3. Explain why eye contact during feeding is important.
- 4. Explain the importance of "Basic Trust" and how it is established.
- Describe the function of the pacifier and what basic needs it fulfills.
- 6. State the time period when it is considered "too late" to start using a pacifier.
- 7. Realize how overweight problems can be avoided in infants.
- 8. Realize the importance of a strong bond with at least one member of the family.
- 9. Define separation anxiety.
- 10. List some of the things that parents can do to "baby proof" their home.
- 11. Explain the use of the playpen in stimulating an infant's growth.
- 12. Explain why it is important for a child to play by him/herself at times.
- 13. Explain when the "critical period" of development is taking place.
- 14. Explain the importance of talking to your child even though he/she cannot understand your words.
- 15. List the proper inoculations for an infant 1 year of age.

#### CHILD GROWTH AND DEVELOPMENT OBJECTIVES : 1 TO 2 YEARS

- Identify the time period when parents can expect their child to begin to walk.
- 2 Explain why the playpen should not be used "all the time".
- 3. Explain how non-harmful mistakes made by children can serve as learning situations.
- 4. Explain methods of handling a minor injury situation without causing unrealistic fears.
- State that tentrums are common between the ages of one year and two years.
- 6. Explain that the need for attention is fulfilled by a child throwing a tantrum.
- 7. Tell how long a child of two years of age may be expected to sleep each night.
- Explain that taking a child to bed with the parents may cause adjustment problems later on.
- 9. Explain that parents may expect to start potty training at about 18 months to 2 years of age.
- 10. Explain that failures during potty training are common and should be expected.
- State why scolding, punishment or anxious prodding may cause damage to a child's self-esteem.
- 12 List some of the fears common to children in the 1-2 year age group.
- 13. Define "parallel play".
- 14. Explain that due to a slow down of physical growth, a child's appetite may lessen at age 1-2 years.

#### CHILD GROWTH AND DEVELOPMENT OBJECTIVES : 2 TO 3 YEARS

- 1. State that the two's are noted for their "no" saying.
- 2. Explain that children need to be encouraged to manage themselves.
- 3. Tell that even though toilet training may be "completed" other accidents may occur for some time.
- 4. List the number of teeth that can be expected by the middle of the third year.
- 5. Explain why it is important for a child to have familiar possessions during times of stress.
- State why children need ample preparation time or warning to do something.
- 7. Explain the importance of simple, honest, answers to a child's questions.
- 8. Compare a child's communication skills at ages 1-2 years, and 2-3 years. (Example: 1-2 years, sentences comprised of two to three words. 2-3 years, sentences more complex.)

#### INCLOSURE 2

1

#### INITIAL STAFF EVALUATION FORMS

tests "be salouse" as yet saint a - culter Speak move dail liet

#### INITIAL STAFF EVALUATION FORM

SUBJECT Child Growth and Development WORKING TIME 15 Minutes FORMAT Filmstrip PRODUCER Parent Magazine. Inc. 52 Vanderbilt Ave, NY, NY	DATE PRODUCED 1974  DATE EVALUATED Oct 1975  PURCHASE/RENTAL SOURCE Same
PRICE \$250.00 Box of five filmstrips AVAILABILITY: CONTRACT PRODUCER OR COORDIN SYNOPSIS Discusses developmental signs a p from Birth to One. Emphasized emotional se  INTENDED AUDIENCE New Parents OBJECTIVES Meets basic objectives (Birth	parent can watch for as the infant grows ecurity.
TECHNICAL ASPECTS:  SOUND: POOR FAIR X GOOD PHOTOGRAPHY: POOR FAIR GOOD X  SPECIAL STRENGTHS AND/OR WEAKHESSES Needs i.e., Privacy Act Statement.Pre-test. Behav	s to have supplemental materials developed.
COULD THIS FORMAT WORK EFFECTIVELY BY ITSEL EXPLAIN: Needs the above mentioned forms.	
COULD THIS SUBJECT/FORMAT (PACKAGE) BEST BE YES X N	
POSITION: INSTRUCTIONAL DESIGNER	

AHS FORM 15 (PACOMED) 25 Mar 1975

#### INITIAL STAFF EVALUATION FORM

SUBJECT Child Growth and Development	TITLE Birth to Age Five
WORKING TIME 15 Minutes	DATE PRODUCED 1974
FORMAT Filmstrip	DATE EVALUATED Oct 1975
PRODUCER Parent Magazine. Inc	PURCHASE/RENTAL SOURCE Same
52 Vanderbilt Ave. NY, NY	Same
PRICE \$250.00 Box of five filmstrips AVAILABILITY: CONTRACT PRODUCER OR COORDINA SYNOPSIS Describes special points to look f feeding, number of teeth, tantrums, and toil	
INTENDED AUDIENCE New Parents OBJECTIVES Meets bastc objectives (1-2 year	rs).
TECHNICAL ASPECTS:  SOUND: POOR FAIR GOOD X E PHOTOGRAPHY: POOR FAIR GOOD X E SPECIAL STRENGTHS AND/OR WEAKNESSES Needs to complete the learning system, i.e., Priva test, Behavioral Objectives, and Post-test.	to have supplemental materials developed
COULD THIS FORMAT WORK EFFECTIVELY BY ITSELF EXPLAIN: Needs supplemental forms to make	
COULD THIS SUBJECT/FORMAT (PACKAGE) BEST BE YES X NO	
EXPLAIN:	31439

AHS FORM 15 (PACOMED) 25 Mar 1975

#### INITIAL STAFF EVALUATION FORM

CUPIFOR Child Crouth & Davidonment	TITLE Division And Division
SUBJECT Child Growth & Development WORKING TIME 15 Minutes	TITLE Birth to Age Five DATE PRODUCED 1974
FORMAT Filmstrip	DATE EVALUATED Oct 1975
PRODUCER Parent Magazine, Inc.	PURCHASE/RENTAL SOURCE Same
52 Vanderbilt Ave, NY, NY	Same
PRICE \$250.00 Box of five filmstrips AVAILABILITY: CONTRACT PRODUCER OR COORD SYNOPSIS Details the signs of the two ye sharing, number of teeth, etc.	
INTENDED AUDIENCE New Parents OBJECTIVES Meets basic behavioral object learning system.	ives for the two to three year age group
PHOTOGRAPHY: POOR FAIR GOOD X	EXCELLENT EXCELLENT ds to have supplemental materials developed havioral Objectives, and Post-test.
COULD THIS FORMAT WORK EFFECTIVELY BY ITS EXPLAIN:	ELF? Not in it's present form.
COULD THIS SUBJECT/FORMAT (PACKAGE) BEST YES X	BE USED AS A SUPPLEMENT TO OTHER INSTRUCTION?
EXPLAIN:	
POSITION:INSTRUCTIONAL DESIGNER	

415

AHS FORM 15 (PACOMED) 25 Mar 1975

## INCLOSURE 3

Child Growth and Development Instructional System Forms

a - n

## PRIVACY ACT STATEMENT (5USC 552a)

1. Authority for collection of information including Social Security Number:

Section 3012, Title 10, US Code.

2. Principal purposes for which information is intended to be used:
To assist medical research personnel in the monitoring of individual patient performance and in evaluation of the PACOMED concept.
The last four digits of the SSN identifies the patient and allows for computer consolidation, comparison, and retrieval of individual data, and cross reference with the outpatient record if required.

3. Routine uses:

This information may be used in research pertaining to the planning and development of a prototype patient and community health staff education module; in the establishment of an objective and behavioral data bank; and in the development of appropriate medical instructional systems. Individual data may be used in analysis and discussion with other AMEDD personnel and consolidated in research reports for general release. No information that identifies any individual patient or physician will be released.

- 4. Providing of this information is voluntary but failure to provide will result in your exclusion from the research project.
- 5. The following forms are currently in use with this statement:
  - AHS Form 192 Demographic Data: Child Growth & Development
    Pre Test Child Growth & Development Information: Birth to One
    Year
    Pre Test Child Growth & Development Information: Year One to
    Year Two
    Pre Test Child Growth & Development Information: Year Two to
  - Year Three
  - Post Test Child Growth & Development Information: Birth to One Year
  - Post Test Child Growth & Development Information: Year One to Year Two
  - Post Test Child Growth & Development Information: Year Two to Year Three
  - AHS Form 194 Demographic, Baseline Data, & Test Scores: Child Growth & Development
  - AHS Form 194a Process Evaluation: Child Growth & Development
  - AHS Form 194b Six Month Follow-up Data: Child Growth & Development
  - Scale Rotter's I.E. Scale
    Scale Nelson-Demy Scale

Demographic Data: Child Growth and Development

INSTRUCTIONS: Please answer each item by supplying mation. If you have any questions, dask the health educator.	
	inalban inimez 67 Wicking instructionals
ADDRESS	a exterà cost real est est feems company (s)
(Street) (City)	(State) (Zip)
TELEPHONE NUMBERS: Home Work	100mm and 1008
1. Last four digits of sponsor's SSAN:	I To I see you
2. Date	
3. Patient's status: (Circle one of the following)  Service Member	
Service Member	Dependent
4. Sponsor's Rank/Status:/	
5. Sex: Male/Female	
6. Age last birthday:	
confide bate. Chi of General & New Expensal	
7. Occupation:	
8. Marital status: Married: Single:	Divorced:
Widowed: Engaged:	Separated:
9. Education completed:	
Elementary School High School (1st - 6th grade) (9th-12th grade)	Baccalaureate Degree
Junior High School 1-3 Years College	Master's Degree
(7th & 8th grade)	Doctor's Degree

## Child Growth and Development Information From Birth to Year One

INSTRUCTIONS: Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answers that statement. Mark an "X" on the line(s) in front of your answer(s).  EXAMPLE: Boston is the capital of:		Pre-test	
	INSTRUCTIONS	have more than one correct answer. Decide which choice or choices best answers that statement. Mark an "X" on	
2-3 hours 5-6 hours 3-4 hours 6-7 hours 1 week 3 weeks 6 weeks 7 weeks 1 week 3 weeks 6 weeks 7 weeks visual stimulation digestive calmness mental development.  Which of the following are the most important reasons for promptly responding to an infants cries? Emotional security Quiet the infant Establishment of basic trust.  The purpose of a pacifier is to: Quiet the infant Provide the basic sucking reflex.	EXAMPLE:	Boston is the capital of:	
	20.39	Connecticut X Massachusetts Vermont	
	. A parent	may expect to feed an infant newborn to six months old every	
How long will it take for an infant's eyes to focus.  1 week 3 weeks 6 weeks 7 weeks.  "Eye contact" with your infant is essential during feedings in order to assure proper:  visual stimulation digestive calmness.  mental development.  Which of the following are the most important reasons for promptly responding to an infants cries?  Emotional security Quiet the infant.  Establishment of basic trust.  The purpose of a pacifier is to:  Quiet the infant.  Provide the basic sucking reflex.	2-3	hours. 5-6 hours.	
	3-4	hours6-7 hours.	
"Eye contact" with your infant is essential during feedings in order to assure proper:	. How long	will it take for an infant's eyes to focus.	
	1 we	eek 3 weeks 6 weeks 7 weeks.	
mental development.  Which of the following are the most important reasons for promptly responding to an infants cries?  Emotional security Quiet the infant.  Establishment of basic trust.  The purpose of a pacifier is to:  Quiet the infant.  Provide the basic sucking reflex.			
. Which of the following are the most important reasons for promptly responding to an infants cries?  Emotional security Quiet the infant.  Establishment of basic trust.  . The purpose of a pacifier is to:  Quiet the infant.  Provide the basic sucking reflex.	visu	al stimulation digestive calmness.	
responding to an infants cries?  Emotional security Quiet the infant.  Establishment of basic trust.  The purpose of a pacifier is to:  Quiet the infant.  Provide the basic sucking reflex.	ment	al development.	
Establishment of basic trust.  The purpose of a pacifier is to: Quiet the infant. Provide the basic sucking reflex.			
. The purpose of a pacifier is to:  Quiet the infant.  Provide the basic sucking reflex.	Emot	ional security Quiet the infant.	
. The purpose of a pacifier is to:  Quiet the infant.  Provide the basic sucking reflex.	Esta		
Quiet the infant Provide the basic sucking reflex.	. The purpo	se of a pacifier is to:	
Provide the basic sucking reflex.	Quie		
Allow the infant to suck between meals without a bottle.	Prov		
National applied there is no the door and it was not		Halabe can will over (astery factor).	
		- Partie and Piot of these a top the door and of eas not	

6.	If a pacifier is to be used, it should be started before the infant is:
	3-5 months old. 7-9 months old.
	5-7 months old.
	The reason for not over feeding the infant is:
	It will cause loss of sleep.
	It will cause slowness to learn motor skills (body movements).
	It will cause an overweight problem.
	Which of the following are elements of a regular schedule for an infant 3-4 months old?
	Eats 3-4 times a day Sleeps longer at night.
	Takes long naps.
	The infant needs a strong bond with at least,
	one, two, or three other member(s) of the family.
0.	Separation anxiety is:
	also known as post partum blues.
	the fear of being left by the parents.
	the fear of being lost.
	The term "Baby Proofing" refers to:
	the use of plastic pants.
	making sure the baby reaches each growth stage "on time".
	making sure your home is safe for the infant to play.
	A playpen should be used when:
	The child begins to walk and get into things.

You are in the room but don't want to hold the child.

He/she can roll over (safety factor).

#### Child Growth & Development: Birth to Year One

13. Infants should be allowed to play by themselves occasionally in order to help:	
Stimulate independence.	
Develop self-creativeness.	
Provide time for housework.	
Build self-reliance.	
14. The "critical period" in a child's development is form birth to what age?	
7-8 months 10-18 months.	
9-11 months 12-18 months.	
15. What is the importance of talking to your infant, even though s/he cannot understand your words?	
It encourages learning.	
It lets the infant know where you are at all times.	
It develops their hearing.	
16. Which of the following are necessary inoculations for a one year old child?	
DPT Measles	
Polio Typhus	
421	

## CHILD GROWTH & DEVELOPMENT OBJECTIVES : BIRTH TO YEAR ONE

- . State the number of feedings a child (newborn to six months old) may be expected to eat daily.
- . State at what age an infant's eyes should already be focusing.
- . Explain why eye contact during feeding is important.
- . Explain the importance of "Basic Trust" and how it is established.
- Describe the function of the pacifier and what basic needs it fulfills.
- State the time period when it is considered "too late" to start using a pacifier.
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- Realize the importance of a strong bond with at least one member of the family.
- . Define separation anxiety.
- . List some of the things that parents can do to "baby proof" their home.
- . Explain the use of the playpen in stimulating an infant's growth.
- . Explain why it is important for a child to play by him/herself at times.
- . Explain when the "critical period" of development is taking place.
- Explain the importance of talking to your child even though he/she cannot understand your words.
- . List the proper inoculations for an infant 1 year of age.

Educational Intervention: Child Growth and Development "From Birth to One"

## Child Growth and Development Information From Birth to Year One

### Post-test INSTRUCTIONS: Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answers that statement. Mark an "X" on the line(s) in front of your answer(s). EXAMPLE: Boston is the capital of: Connecticut X Massachusetts Vermont 1. Which of the following are necessary inoculations for a one year old child? Polio \_\_\_\_ Measles \_\_\_ Typhus 2. What is the importance of talking to your infant, even though he/ she cannot understand your words? \_\_\_ It encourages learning. \_\_\_\_ It lets the infant know where you are at all times. It develops their hearing. 3. The "critical period" in a child's development is from birth to what age? 7-8 months. \_\_\_\_ 10-18 months. 9-11 months. 12-18 months. 4. Infants should be allowed to play by themselves occasionally in order to help: stimulate independence. \_\_\_\_ develop self-creativeness. \_\_\_ provide time for housework. build self-reliance.

Chi	ld Growth & Development: Birth to Year One
5.	A playpen should be used when:
	the child begins to walk and get into things.
	he/she can roll over (safety factor).
	you are in the room but don't want to hold the child.
6.	The term "Baby Proofing" refers to:
	the use of plastic pants.
	making sure the baby reaches each growth stage "on time".
	making sure your home is safe for the infant to play.
7.	Separation anxiety is:
	also known as post partum blues.
	the fear of being left by the parents.
	the fear of being lost.
8.	The infant needs a strong bond with at least,
	one, two, or three other member(s) of the family.
9.	Which of the following are elements of a regular schedule for an infant 3-4 months old?
	Eats 3-4 times a day Sleeps longer at night.
	Takes long naps.
0.	The reason for not over feeding the infant is:
	it will cause loss of sleep.
	it will cause slowness to learn motor skills (body movements).
	it will cause an overweight problem.
1.	If a pacifier is to be used, it should be started before the infant is:
	3-5 months old. 5-7 months old. 7-9 months old.

Chi	ld Growth & Development: Birth to Year One
12.	The purpose of a pacifier is to:
	quiet the infant.
	provide the basic sucking reflex.
	allow the infant to suck between meals without a bottle.
13.	Which of the following are the most important reasons for promptly responding to an infants cries?
	Emotional security Quiet the infant.
	Establishment of basic trust.
4.	"Eye contact" with your infant is essential during feeding in order to assure proper:
	visual stimulation digestive calmness.
	mental development.
5.	How long will it take for an infant's eyes to focus.
	1 week 3 weeks 6 weeks 7 weeks.
6.	A parent may expect to feed an infant newborn to six months old every:
	2-3 hours 5-6 hours.
	3-4 hours 6-7 hours.

		Child Growth and Development Information
		1-2 Years Pre-test
		116-1691
	STRUCTIONS:	Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice(s) best answers that statement. Mark an "X" on the line(s) in front of your answer(s).
EXA	AMPLE:	Boston is the capital of:
	ry(ar	Connecticut X Massachusetts Vermont
1.	What is th	e age range when a child can be expected to start to
	7-9 m	onths. 9-18 months. 18-24 months.
2.	The plaype	n should be used:
	all t	he time to give a sense of belonging to a special area.
	somet	imes to give a balance to "exploration".
	not a	t all, because it constricts the child's learning.
3.	Non-harmfu	l mistakes by a child:
	should	d be stopped, because they are dangerous.
	are go	ood if you can teach the child how to avoid the mistake.
	will s	stop a child's growth if you yell and scream at him/her.
٠.	If your ch	ild has a small injury you should:
	make a	s big deal out of it so s/he will know you care.
	pay so	ome attention to it, but do not make it bigger than it is.
	ignore	e it.
		estring tell a funt a

### Child Growth & Development Information - 1-2 Years 5. Tantrums are: common to children in the age group 1-2 years of age. signs of bad "up-bringing". signs of insecurity. 6. A child throws a tantrum because: \_\_\_\_ s/he is bored. \_\_\_\_ there is something physically wrong. s/he wants attention. 7. A two year old child can be expected to sleep approximately: \_\_\_\_ 6-8 hours per night. \_\_\_\_ 10-12 hours per night. 7-9 hours per night. 8. Why is it unwise to take a child into bed with the parents? They will wet the bed. They will start to demand that they sleep with you and will cause adjustment problems later on. They will take up the whole bed. 9. Parents can expect to start potty training at about age: 12-18 months. \_\_\_\_ 18 mos - 2 yrs. \_\_\_\_ 2-2½ years. 10. Failures in potty training are: uncommon. \_\_\_\_ common and should be expected. uncommon once the child has had some success. 11. Scolding, punishment or anxious prodding may cause: good self-discipline. \_\_\_\_ obedience. damage to self-esteem. 12. Which of the following are fears of some children in the 1-2

year old group?

\_\_\_ Animals \_\_\_ Deformities

\_\_\_ Dark \_\_\_\_ Sudden loud noises

	d Growth & Development Information - 1-2 Years	
13.	"Parallel play" is:	
	imitationrole playingplaying "alone" while is a group of other children	
14.	The child's appetite lessens at 1-2 years of age because:	
	he/she is more selective about what they eat.	
	he/she has stopped growing as much as before, therefore, the need is lessened.	
	he/she is not as active as in the earlier months and thus does not need the extra energy.	
	Explain that the need for attention is fulfilled by a child to throwing a tableum.	
	Explose that contacts thild to bed with the parents may cause adjustment problems later on:	
	list some of the fears common to children in the 1-2 year sew group.	
	define "payallal play".	

#### CHILD GROWTH AND DEVELOPMENT OBJECTIVES : 1 TO 2 YEARS

Upon completion of this learning program the patient will be able to:

- . Identify the time period when parents can expect their child to begin to walk.
- . Explain why the playpen should not be used "all the time".
- Explain how non-harmful mistakes made by children can serve as learning situations.
- Explain methods of handling a minor injury situation without causing unrealistic fears.
- . State that tantrums are common between the ages of one year and two years.
- Explain that the need for attention is fulfilled by a child throwing a tantrum.
- . Tell how long a child of two years of age may be expected to sleep each night.
- Explain that taking a child to bed with the parents may cause adjustment problems later on.
- Explain that parents may expect to start potty training at about 18 months to 2 years of age.
- Explain that failures during potty training are common and should be expected.
- State why scolding, punishment or anxious prodding may cause damage to a child's self-esteem.
- . List some of the fears common to children in the 1-2 year age group.
- . Define "parallel play".
- Explain that due to a slow down of physical growth, a child's appetite may lessen at age 1-2 years.

Educational Intervention: Child Growth and Development "One to Two Years"

## Child Growth and Development Information 1-2 Years

	Post-test	
INSTRUCTIONS:	Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice(s) best answers that statement. Mark an "X" on the line(s) in front of your answer(s).	
EXAMPLE:	Boston is the capital of:	
	Connecticut X Massachusetts Vermont	
1. The child'	s appetite lessens at 1-2 years of age because:	
he/sh	e is more selective about what they eat.	
he/she	e has stopped growing as much as before, therefore, the is lessened.	
he/she	e is not as active as in the earlier months and thus not need the extra energy.	0
2. "Parallel p	lay" is:	
imita	playing "alone" while in a group of other children.	
<ol><li>Which of the old group?</li></ol>	ne following are fears of some children in the 1-2 year	
Anima]	s Dark Deformities Sudden loud noises	-
4. Scolding, p	ounishment or anxious prodding may cause:	
good s	elf-discipline damage to self-esteem obedience.	3
5. Failures in	potty training are:	,
uncomm	uncommon once the child has had some success.	

6.	Parents can expect to start potty training at about age:
	12-18 mos 18 mos 2 yrs 2-2½ yrs.
7.	Why is it unwise to take a child into bed with the parents?
	They will wet the bed They will we the bed They will be a second of the bed
	They will start to demand that they sleep with you and will cause adjustment problems later on.
	They will take up the whole bed.
8.	A two year old child can be expected to sleep approximately:
	6-8 hours per night 10-12 hours per night.
	7-9 hours per night.
9.	A child throws a tantrum because:
	s/he is bored there is something physically
	wrong.
0.	Tantrums are:
	common to children in the age group 1-2 years of age.
	signs of bad "up-bringing".
	signs of insecurity.
1.	If your child has a small injury you should:
	make a big deal out of it so s/he will know you care.
	pay some attention to it, but do not make it bigger than it is.
	ignore it.
2.	Non-harmful mistakes by children:
	should be stopped, because they are dangerous.
	are good if you can teach the child how to aboid the mistake.

Chi	ld Growth and Development - 1-2 Years
13.	The playpen should be used:
	all the time to give a sense of belonging to a special area.
	sometimes to give a balance to "exploration".
	not at all, because it constricts the child's learning.
14.	What is the age range when a child can be expected to start to walk?
	7-9 months 18-24 months.
	0-19 mancha

### Child Growth and Development Information 2-3 Years

	Pre-test
INSTRUCTIONS:	Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answers that statement. Mark an "X" on the line or lines in front of your answer(s).
EXAMPLE:	Boston is the capital of:
	Connecticut X Massachusetts Vermont
1. The "two's	" are noted for their:
physi	cal growth and development of the child.
no-sa	ying.
menta	al growth of the child.
time	of agreement between parent and child.
2. Children s	should be encouraged to:
	play by themselves without supervision.
3. Once toile toilet acc	et training has been successfully completed, other idents:
will	stop will continue as before.
will	occur from time to time.
4. How many t year?	eeth can be expected by about the middle of the third
5	10 13 15 20
times of:	happiness stress calm.
-	
	464

#### Child Growth and Development - 2-3 Years

6.	To successfully complete a task a child must have:
	no time to prepare ample time to prepare.
	little time to prepare.
7.	When a child asks you a question your answers should be:
	honest. half truths to meet their learning abilities.
	complex over their head if it deals with a "touchy" subject.
	simple.
8.	By age three, a child's sentences are:
	two or three words.
	simple.
	complex.
	201725-007

#### CHILD GROWTH AND DEVELOPMENT OBJECTIVES : 2 TO 3 YEARS

Upon completion of this learning program the patient will be able to:

- . State that the two's are noted for their "no" saying.
- . Explain that the children need to be encouraged to manage themselves.
- . Tell that even though toilet training may be "completed" other accidents may occur for some time.
- . List the number of teeth that can be expected by the middle of the third year.
- Explain why it is important for a child to have familiar possessions during times of stress.
- State why children need ample preparation time or warning to do something.
- Explain the importance of simple, honest, answers to a child's questions.
- Compare a child's communication skills at ages 1-2 years, and 2-3 years. (Example: 1-2 years, sentences comprised of two to three words. 2-3 years, sentences more complex.)

Educational Intervention: Child Growth and Development "Two to Three Years"

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### Child Growth and Development Information 2-3 Years

	Post-test
INSTRUCTIONS:	Read each statement carefully. The statements listed may have more than one correct answer. Decide which choice or choices best answers that statement. Mark an "X" on the line or lines in front of your answer(s).
EXAMPLE:	Boston is the capital of:
	Connecticut X Massachusetts Vermont
1. By age thr	ee, a child's sentences are:
Two o	or three words simple complex.
2. When a chi	ld asks you a question your answers should be:
hones	t half truths to meet their learning abilities.
compl	ex over their head if it deals with a "touchy" subject.
	fully complete a task a child must have:
no ti	me to prepare ample time to prepare.
littl	e time to prepare.
	ossessions are sources of security to a child during
times of:	happiness. stress. calm.
	eeth can be expected by about the middle of the third
year?	5 10 13 15 20
6. Once toile accidents:	t training has been successfully completed, other toilet
will	stop will continue as before.
will	occur from time to time.
	0.43

Child Growth and Development - 2-3 Ye	ars	L
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7.	Children should be encouraged to:
	manage themselves.
	become a member of the group.
	play by themselves without supervision.
8.	The "two's" are noted for their.
	physical growth and development of the child.
	no-saying.
	mental growth of the child.
	time of agreement between parent and child.

#### INCLOSURE 5

Formative Evaluation: Patient Version

A 16

FORMATIVE EVALUATION: PATIENT VERSION

1. Date:

2. Patient's Name:

3. Age:

4. Social Security Number:

5. Race or Ethnicity:

6. Sex:

7. Education. Completed:

8. Occupation:

Instructions: This form is to be filled out in a personal interview with the patier as the patient works the program. The interviewer should make a special effort to put the patient at ease and explain that we are testing the program, NOT THE PATIENT. The results of these tests will be kept private and will only be seen by those concerned with this project.

#### **OPERATIONAL DEFINITIONS:**

9. Program Title:

10. Evaluator:

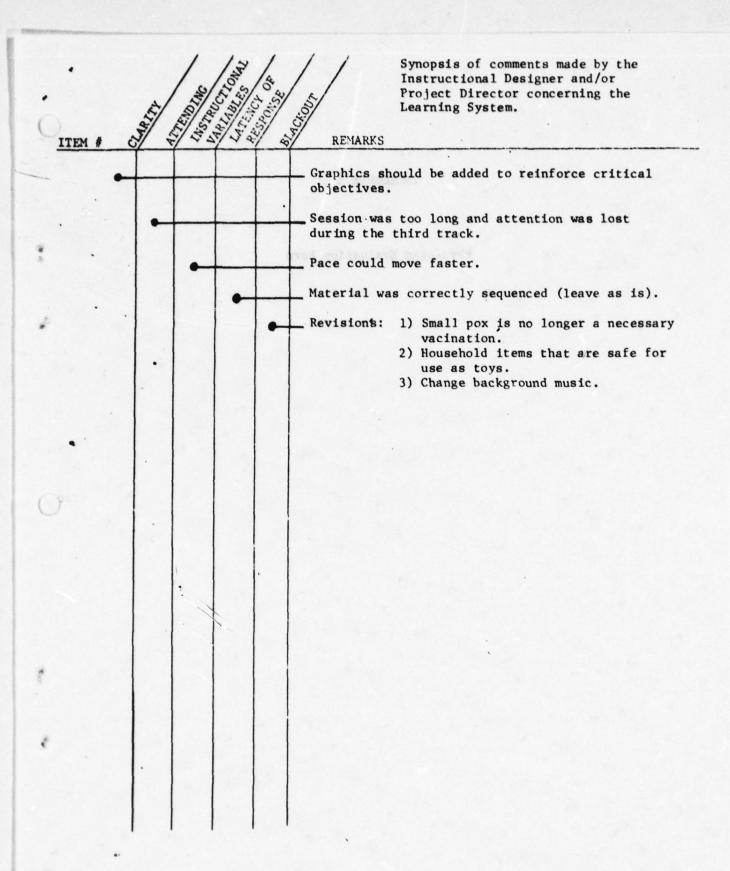
CLARITY: A need for rewording or rearrangement of material to improve the sentence structure, vocabulary, explanation, instruction or question.

ATTENDING: A need to heighten interest to gain attention, arouse curiosity and provide a challenge to learner distraction, boredom or apathy.

INSTRUCTIONAL VARIABLES: A need to improve the presentation in regard to pace, sequence, organization, size of learning steps, use of prompts, opportunities for practice or reinforcement.

LATENCY OF RESPONSE: A need to revise material to improve performance.

BLACKOUT: A need to delete all learner activities or expository material decued nonessential in producing a desired response.



### INCLOSURE 5

Physician Evaluation Form

PHYSICIAN/NURSE CLINICIAN EVALUATION FORM

	SUBJECT Child Growth + Dusting + TITLE Child Growth + Dusting + TITLE Child Growth + Dusting + TITLE
	EVALUATOR Daniel & Person TITLE Child Growth + Declyment TITLE
	IS THE SUBJECT COVERED COMPLETELY?
	WHAT WOULD YOU ADD?
¢	WHAT WOULD YOU DELETE? Smallprx faccinting
	done wher hit the sight lite
	dead wanter he could beach.
	WHAT WOULD YOU DELETE? Smallpex face.
	Michael Millian
	clienty stated.
	IS THE CONTENT ORGANIZED PROPERLY) with bothle in bedonied to be
	IS THE CONTENT ORGANIZED PROPERTY with fittle in bed mieds to be
	IS THE CONTENT ORGANIZED PROPERLY! CULTURE!
	Toutet training will account at
	the the infante occurance Take out
	IS THE CONTENT ORGANIZED PROPERLY! cultics.  IF NOT, HOW WOULD YOU CHANGE THE SEQUENCE?  Tould training will occur at  the the infants recurrence take out
	1177

(BEHAVIORS OR KNOWLEDGE TO MUST MASTER IN ORDER TO COPE AND LIVE EFFECTIVELY WITH HIS DISEASE OR PROBLEM.)

IF NOT, PLEASE ELABORATE.

ARE FAMILIAR SYMBOLS AND CONCEPTS USED TO HELP EXPLAIN UNFAMILIAR SUBJECT MATTER?

yes

FOR WHAT PATIENT POPULATION WOULD YOU RECOMMEND THIS PRESENTATION?

no comment

DO YOU FEEL THE PRESENTATION IS TOO LONG, TOO SHORT AND WHY?

good as is ?

### INCLOSURE 6

Final Staff Evaluation Form

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#### FINAL STAFF EVALUATION FORM

SUBJECT: Chil	d Growth & Development	TITLE: From Birth to Five
WORKING TIME:_	55 Minutes	DATE PRODUCED: 1975
FORMAT: Fil	mstrip	DATE EVALUATED: April 1976
PRODUCER: Par	ent Magazine Inc. NY, N	Y
PRICE: See Co	st Analysis, Table 11,	INTENDED AUDIENCE: New Parents
gro	w from birth to three ye	gns of growing in children as they ears of age. Some specific signs
men	tioned are tantrums, ne	gativism, sharing, emotions.
OBJECTIVES:	Met basic requirements	of the learning system behavioral
	objectives.	
_		
SPECIAL STRENG	THE AND WEAKNESSES. The	e filmstrips were converted to video
tape to use du	ring the testing phase.	It was necessary to develop the
following mate	rials to supplement the	learning system: Privacy Act State-
ment, Demograp	hic Data Form, Pre-test	s, Behavioral Objectives, and Post-
tests.		
DEFINITION OF	SELF-INSTRUCTIONAL FEAT	IDEC
DEFINITION OF	SELF-INSTRUCTIONAL FEATO	JRES
PRE-TEST:	Questions or tasks at system to measure subje- material to be presented	the beginning of the instructional ect entry level (prior knowledge) of ed.
OBJECTIVES:	Description of what the completion of the learn	e subject will be able to do upon ning system.
PRACTICE:	Questions or tasks in the criterion measures	the instructional system similar to
POST-TEST:	Questions or tasks at a system which prove the information.	the conclusion of the instructional subject has learned the intended
FEEDBACK:	Initial reactions to the	ne instructional system by the

PLEASE TURN PAGE

patient (Interview comments.)

ATTITUDE SCALES: Measures feelings, emotions, or attitudes toward the instructional strategy, it's contents and concepts.

The learning system contains the self-instructional features marked with a . The results of each trial (version) are listed to the right of the feature.

Features	1st Version	2nd Version
Pre-test		
Birth to One	3 of 15 passed.	7 of 15 passed.
One to Two	6 of 15 passed.	7 of 15 passed.
Two to Three	7 of 15 passed.	10 of 15 passed.
Objectives	See Behavioral Objectives	
Practice	See Instructional Syste	em .
Post-test		
Birth to One	8 of 15 passed.	14 of 15 passed.
One to Two	6 of 15 passed.	12 of 15 passed.
Two to Three	9 of 15 passed.	13 of 15 passed.
Feedback See Formative Evaluation		
Attitude Scale	See Process Evaluation	
TECHNICAL ASPECTS:		
Po Sound:	or Fair Good Exc	ellent

MATRIX FOR FIELD IMPLEMENTATION

TITLE: Child Growth & Development

TRACK	PRODUCER	COPYRIGHT	PHOTOGRAPHY	SOUND	SCRIPT	RECOMMENDATIONS
Birth to Year One	Parent Magazine	Permission to convert to video- tape would have to be secured.	Add graphics to reinforce instruction	Re-record Script 1s at a slower the same pace as the original except for the examples that were extracted a being "ni to know" rather th "need to know".	Script is the same as the original except for the exam- ples that were ex- tracted as being "nice to know" rather than "need to know".	Recommend gaining copyright clearance to convert to video-tape. If copyright cannot be secured, re-write the script.
One to Two Years		1307	g il 1g g c 21 to f ccros ass ca 21 ca 2	sort sor	r it lor	nlippl or a Lameligi (add-Eula) (add-Eula)
Two to Three Years	=					weend :83.5 spend on schmitzve 3 30 #3 ₹ween

#### APPENDIX 9

CURRENT BASELINE INFORMATION AND COST ANALYSIS

more officiant, and the distriction only in the materials. Date was

#### 1. SECTION I: CONVENTIONAL METHODOLOGY.

#### a. Purpose.

(1) The purpose of this descriptive write-up of the conventional methodology was to establish a good information base for the State-of-the-Art and costs of the patient information and education currently being conducted by the family practice staff physicians, residents, ambulatory care nurse clinicians, and the dietician in the ambulatory setting. Data was collected from these groups because their clinical preparation emphasized the importance of comprehensive patient care. It was felt that the optimum state-of-the-art would be thus represented.

#### b. Background.

- (1) Cost-benefit analysis is often as an alternative to evaluation research, but essentially it is a logical extension of it. In order to affix dollar values to the benefits of a program, first there has to be some evaluative evidence of what kinds and how much benefit there has been with the conventional method. However, one of the major limitations to effective utilization of this approach has been the dearth of good information. Without basic baseline cost and evaluative evidence of the conventional method, the whole procedure of cost-benefit analysis becomes a series of guesses. As a result, decisions on the possible expansion of the prototype system versus the conventional method would be dependent almost entirely on "professional judgment."
- (2) One way out of the morass is to posit a level of benefits and assume that alternative programs are all designed to reach the same (although in actual practice this is far from true) goal. Under this fixed-benefit strategy, the analyst works out the costs that different programs incur to achieve the given level of benefit; the least expensive one is the best bet.<sup>1</sup>

#### c. Method.

- (1) Setting of the study.
- (a) Selected clinics of the Outpatient Facility and the Family Practice Clinic, US Army MEDDAC, Fort Belvoir, VA 22060.
  - (2) Subjects.
- (a) The sample consisted of 21 participants who were requested to complete the Baseline Coding Sheets during the data collection phase, 15 Mar 15 Aug 1975. Some homogeneity of the sample was insured by selecting as participants only health care workers who met the following criteria:

Weiss, C.H., Evaluation Research: Methods of Assessing Program Effectiveness (Englewood Cliffs, New Jersey, Prentice Hall, Inc., 1972), 48.

- 1 They were available and willing to participate,
- 2 They worked in clinical areas that covered seven of the eight topic selections for PACOMED, and
- 3 Their clinical preparation emphasized the importance of patient education.
  - (b) The breakdown of the subjects was as follows:
    - 1 Five Staff Family Practice Physicians
    - 2 Six First Year Family Practice Residents
    - 3 Three Second Year Family Practice Residents
    - 4 One Third Year Family Practice Resident
    - 5 One Family Practice Nurse Clinician
    - 6 Two Internal Medicine Nurse Clinicians
    - 7 One OB/GYN Nurse Clinician
    - 8 One Pediatric Nurse Clinician
    - 9 One Dietician in the ambulatory setting
- (3) Development of the Data Collection Tool (The Baseline Coding Sheet Questionnaire).
- (a) Since one of the purposes of the cost-benefit analysis section of the study was to establish a good information base for the state-of-the-art and cost of patient information and education, an instrument had to be found or devised that could document both the current state-of-the-art and cost of patient information and education. A search of the literature revealed no tool that would be able to evaluate the specific items that were included in this segment of the investigation. After developing a set of operational definitions, wording, rewording, and pre-testing a question-naire, it was ready for clinical use in two months. The questionnaire was pre-tested on a group of four family practice physicians for a ten day period. The development of the questionnaire was the combined effort of COL Henry C. Reister, MC, Chief, Family Practice Service, and LTC Deloros H. Kucha, ANC, Ph.D., Director, Project: PACOMED. See pages 454-455 for an example of the Baseline Coding Sheet.

#### d. Data Collection.

(1) Each morning the investigators placed a Baseline Coding Sheet on the desk of the participants and picked up the one from the day before. These sheets were reviewed each day by the investigators to insure that the questionnaires were filled out properly.

#### BASELINE CODING SHEET

INSTRUCTIONS: Read the operational definitions. Fill in the information requested for each patient encounter, in addition to time spent in giving medical advice, patient information or health education. Your time and effort is greatly appreciated.

#### OPERATIONAL DEFINITIONS:

MEDICAL ADVICE: Giving a limit

Giving a limited, unstructured explanation or directions using professional knowledge or intuition on some aspect

of health care or behavior.

PATIENT INFORMATION: Showing a film, distributing pamphlets, giving classes cr

counseling patients, etc. about a given health area, service or problem without regard to prespecified terminal objectives in the cognitive, psychomotor or affective domains. The emphasis is on unstructured information without utilization of scientific assessment and teaching strate-

gies.

HEALTH EDUCATION: Using structured information with scientific assessment

and teaching strategies. Those strategies encompass the cognitive, psychomotor and affective domains to alter an individual's attitudes and behavior in favor of improved

health.

#### EXAMPLE WORKSHEET:

HEALTH CARE PROVIDER Dr JOE DOKES	RACE	CAU
FACILITY FAMILY HEALTH CENTER	DATE	10 JAN 75

48.0	110			ad the many sain	ADVICE	PAC	OMED DATA	A (IN MINUTES)
PT NAME & SSAN	RACE	AGE	SEX	RUBRIC(s)	MEDICAL	PT INFO	PT EDUC	MODALITIES, RMKS, CMTS
11	1 000		- 1	off contents	19 14 Left (8)	11444/	1/////	Toldhing weight would have sp
JIM Smith		112		Obesity	7777777	5		Went over calorie country
123-48-6788	W	43	14	Obesity			0	Samuel Services
NAN KNIGHT					15-	1/////	1//////	Discussed progresss
THEN ANIGHT	В		-	Hoertension		3	///////	Referral to PACOMED & use of
234-56-7890	D	01	r	.,,,		1/////	. 0	Actuarial tables
Robert White		0.0		Contraception	5-			IREPLORED REASONS - advised delay
	1 60	29	M	Advice		10		used visual Material to come
567-89-0012				HATTE AUG			٥	precedure & hazards

PACOMED WORKSHEET HEALTH CARE PROVIDER FACILITY

DATE

TOTAL					T	T		
PACOMED DATA (IN MINUTES) PT INFO PT EDUC MODALITIES, REMARKS, COMMENTS								
MEDICAL ADVICE PT INFO								
SEX RUBRIC(s)								
RACE AGE SEX RUBRI								
PT NAME & SSAN								

#### e. Limitations.

(1) It took 120 working days or approximately four months to collect from 20 to 30 questionnaires from each participant.

#### f. Operational Definitions.

- (1) Military Pay Computations.
  - (a) Medical Corps.

 $\frac{1}{1} \frac{\text{Colonel}}{\text{Colonel}} - 0/6 \text{ with 18 years service: Total Entitlements} = $32,628 + $8,576 \text{ (variable incentive pay)} + $4,200 \text{ (medical pay)} + $5,147.28 \text{ (estimated fringe benefits)*=} $50,551.28 \text{ annual} + 12 \text{ months} = $4,212.61 + 20 \text{ working days} = $200.60 + 8 \text{ hours} = $25.10 \text{ per hour.}^2,^3$ 

 $\frac{3 \text{ Major} - 0/4 \text{ with 10 years service: Total Entitlements} = $22,560 + $5,791.20 \text{ (variable incentive pay)} + $4,200 \text{ (medical pay)} + $3,474.72 \text{ (estimated fringe benefits)} = $36,025.95 \text{ annual} \div 12 \text{ months} = $3,002.10 \div 20 \text{ working days} = $142.95 \div 8 \text{ hours} = $17.85 \text{ per hour.}$ 

 $\frac{4}{\text{captain}} - 0/3 \text{ with 6 years of service: Total Entitlements} = \$19,704 + \$5,053.20 \text{ (variable incentive pay)} + \$1,200 \text{ (medical pay)} + \$3,031 \text{ (estimated fringe benefits)} = \$28,988.20 \text{ annual} \div 12 \text{months} = \$2,415.70 \div 20 \text{ working days} = \$115 \div 8 \text{ hours} = \$14.40 \text{ per hour.}$ 

#### (b) Army Nursing Corps.

Lieutenant Colonel - 0/5 with 16 years of service: Total Entitlements = \$27,840 + \$4,366.80 (estimated fringe benefits) = \$32,206.80 annual  $\div$  12 months =  $$2,683.90 \div$  20 working days =  $$127.80 \div$  8 hours = \$16.00 per hour.

 $\frac{2}{\text{titlements}} = \$21,336 + \$3,252 \text{ (estimated fringe benefits)} = \$24,588 \text{ annual} \\ $\pm 12 \text{ months} = \$2,049 \div 20 \text{ working days} = \$97.57 \div 8 \text{ hours} = \$12.20 \text{ per hour.}$ 

<sup>&</sup>lt;sup>2</sup>USAFAC LABEL 23, 1 Nov 76, Average Monthly Regular Military Compensation (RMC) USGPO 1976, 750-382/10, Region 5-I.

<sup>&</sup>lt;sup>3</sup>USA Finance and Accounting, Sep 77, Military Pay and Allowances, USAEC, Fort Belvoir, VA.

<sup>\*</sup>Fringe Benefits were based on 20 percent of the base pay.

#### (c) Enlisted.

- $\frac{1}{1} \frac{\text{Sergeant First Class}}{\text{Total Entitlements}} = \frac{1}{14,772} + \frac{1}{12,156.40} \text{ (estimated fringe benefits)} = \frac{16,928.40 \text{ annual}}{12 \text{ months}} = \frac{1}{12,410.70} + \frac{1}{12 
- $\frac{2}{\text{Specialist 5th Class}} \text{E/5 with 4 years service:}$   $\text{Total Entitlements} = \$10,236 + \$1,339.90 \text{ (estimated fringe benefits)} = \$11,575.90 \text{ annual } \div 12 \text{ months} = \$964.65 \div 20 \text{ working days} = \$45.95 \div 8 \text{ hours} = \$5.75 \text{ per hour.}$
- $\frac{3}{100} \frac{\text{Specialist 4th Class} \text{E/4 with 2 years service:}}{1000} = \$8,736 + \$1,140 \text{ (estimated fringe benefits)} = \$9,876 \text{ annual } \div 12 \text{ months} = \$823 \div 20 \text{ working days} = \$39.19 \div 8 \text{ hours} = \$4.90 \text{ per hour.}$

#### g. Findings.

- (1) Initially, 15 family practice physicians participated in the study. Due to permanent change of station moves and other extraneous duties, only four staff physicians and two residents were able to complete 20 study days or approximately one work month.
- (2) Of the four staff family practice physicians, all completed 20 days. The physicians spent approximately 40 percent of their time in the clinical area, 40 percent teaching, and the remaining 20 percent in administrative duties as well as duty in the Emergency Room or Acute Minor Illness Clinic. The range of the number of patients seen was 188-289 for each physician, or a total of 935 patients for 80 staff physician working days. Out of that total, the breakdown according to sex was 370 male and 565 female, or 40 percent male and 60 percent female patients. The racial breakdown was 799 caucasian, 121 negro, and 15 patients classified as other. The total number of hours spent in medical advice was 91, with a range of 2.5 hours to 38.6 hours.
- (3) The medical advice category appeared to vary greatly between the individual practitioners. The total hours spent in giving patient information was 24, with a range of zero hours to 13.5 hours. Or to express it another way, only 25 percent of the time was spent in giving patient information when compared to medical advice. Of particular significance was the fact that none of the physicians were able to find time to give patient education. What had been revealed, then, was that the average patient visit was approximately 16.8 minutes with 10 percent of that time being spent in patient information (1.6 minutes) and none in patient education. The cost for that optimum standard ranged from \$65.26 to \$276.08 per physician or a total of \$478.79 per 20 work days (for the four physicians) for 1.6 minutes of patient information per patient, depending, of course, on the rank of the physician. Or in essence, it cost 63 cents

per patient encounter for 1.6 minutes of patient information by a physician without any benefit of patient education. Sixty-three cents represented an approximate cost per patient for information and education. The actual cost per patient was 51 cents because only three of the four physicians involved used at least one category other than medical advice. During the 20 work day period a total of 9 diabetics, 48 hypertensive, and 11 obese patients were seen.

- (4) See Table 1, page 461, Baseline Information and Cost Analysis Pertaining to Patient Information and Education, At Selected Clinics, The Outpatient Facility, and Family Practice Clinic. Two family practice residents out of ten were able to complete 20 study days. One physician was a second year resident and the other was a first year resident. The second year resident spent 30 percent of his time in the Family Practice Ambulatory Setting and the first year resident spent 10 percent of his time in the Family Practice Ambulatory Setting. The respective number of patients seen were 66 and 76 for each physician, or a total of 142 patients for 40 work days. Out of that total the breakdown according to sex was 61 male and 81 female, or 43 percent male, and 57 percent female patients. The racial breakdown was 129 caucasian, 13 negro, and zero patients classified as other. The total number of hours spent in medical advice was 16.6 hours with a low of 3.3 hours and a high of 13.3 hours. The medical advice category appeared to have varied as much between the residents as among the staff members. The total hours spent in giving patient information was 8.8 hours, with a low of 2.8 hours and a high of 6 hours. figure differed from the staff members. The residents spent 50 percent of their time in giving patient information when compared to medical advice, and 25 percent more time giving patient information than the staff physicians. Note that the residents found some time for patient education even though it only amounted to 2 percent and 5 percent of their total time per patient. In summary, for the two residents the average patient visit is approximately 20.8 minutes with 11-26 percent of that time being spent in patient information and 2-5 percent being spent in patient education. The cost for that standard was \$46.08 to \$93.60 per resident or a total of \$139.68 per 20 work days (for two physicians) for an average of 3.8 minutes of patient information and .8 minutes of patient education per patient. In other words, it costs 98 cents per patient information and education per patient encounter.
- (5) The five ambulatory nurse clinicians that participated in the study saw a total of 1,114 patients in a 30 day period. The range of the number of patients was 140 to 392 patients for each clinician. Out of that total, the breakdown according to sex was 400 male and 714 female, or 36 percent male and 64 percent female patients. The racial breakdown was 1001 caucasian, 103 negro, and 10 patient classified as other. The total number of hours spent in medical advice was 68.6, with a range of .9 hours to 29 hours. The medical advice category varied as greatly for the individual nurse clinicians as it did for the physicians. The total hours spent in giving patient information was 67.1, with a range of 6.4 to 30 hours. Or, almost exactly the same time was spent in giving medical advice as patient information. Or, three times the amount of time was spent in giving patient information when compared with the physicians. The total number of hours spent in patient education was 101 out of 469.7 visit hours for 30 study days (per nurse clinician), or approximately 22.4 percent of their time was devoted to patient education compared to none

being given by the staff family practice physicians. The cost for patient information and education over the 30 day study period was \$1,686.94 for an average of 4.4 minutes of patient information and 6.4 minutes of patient education per patient encounter. Expressing it another way, for approximately 11 minutes of patient information and education by a nurse clinician the cost was \$1.51 exclusive of any handouts, preparation time or additional group sessions, etc. Note, only the averages for time spent in giving patient information and education were indicated in the write-up. There were individual cases where two of the nurse clinicians from Internal Medicine spent anywhere from 20 minutes to one hour in giving patient instruction. However, this was the exception rather than the rule. During the 30 day period a total of 89 diabetic, 357 hypertensive, and 67 obese patients were seen.

(6) The dietician in the ambulatory setting saw a total of 420 patients in a 30 day period. Out of that total, the breakdown according to sex was 134 male and 286 female, or 32 percent male and 68 percent female patients. The racial structure was 375 caucasian, 40 negro, and 5 patients classified as other. The total number of hours spent in giving patient information was 43.2 hours and patient education only 2.1 hours for 30 work days. The dietician compared to the nurse clinicians spent only 3 percent of her time in patient education compared to 72 percent of her time spent in patient information. In other words, for 6.2 minutes of patient information and .3 minutes of patient education, or 6.5 minutes of patient information and education per encounter by the dietician the cost was approximately 82 cents (for a 1LT) exclusive of handouts, preparation time and audio visual aids, etc. During the 30 work day period a total of 23 diabetic, 10 hypertensive, and 387 obese patients were seen. Most of the obese patients were follow-up visits that attended group sessions.

#### h. Summary.

- (1) In the findings, the cost of medical advice was not isolated because it was felt that medical advice was inherent and necessary for every patient encounter, and in no way could be eliminated or altered. This included such things as checking laboratory tests, type of medications, and reviewing progress of treatment plan with the patient.
- (2) There was a wide discrepancy in the amount of time spent giving patient information compared to patient education among the professional participants. There is a distinction between "health information" and "health education." Information has no intrinsic value apart from its effective use. Education is concerned with the effective use of information. While there was an abundance of health information available, it should not be assumed that health education was occurring.
- (3) See Table 1, page 461, Baseline Information and Cost Analysis Pertaining to Patient Information at Selected Clinics, The Outpatient Facility and Family Practice Clinic. The chart summarizes the average amount of time each category or practitioner spends in either patient information or education and the cost per patient encounter.

### OPERATIONAL DEFINITIONS FOR TABLE 1, page

### Column No.

1	TOTAL VISIT HOURS = Total time (Hours) spent with all pa-
	tients seen.
2	TIME PER PATIENT = Total visit hours X 60 + number of patients.
3	TOTAL HOURS MEDICAL ADVICE = Amount of time (Hours) of total patient visits spent on medical advice.
4	PERCENT OF TIME TO MEDICAL ADVICE = Total hours medical advice  total visit hours.
5	
	TIME PER PATIENT MEDICAL ADVICE = Total hours medical advice total number of patients seen.
6	TOTAL HOURS PATIENT INFORMATION = Amount of time (Hours) of
	total patient visits spent on patient information.
7	PERCENT OF TIME TO PATIENT INFORMATION = Total hours patient
	information + total visit hours.
8	TIME PER PATIENT TO PATIENT INFORMATION = Total hours patient
	information * total number of patients.
9	TOTAL HOURS PATIENT EDUCATION = Amount of time (Hours) of
	total patient visits spent on patient education.
10	PERCENT OF TIME TO PATIENT EDUCATION = Total hours patient
	education : total visit hours.
11	TIME PER PATIENT TO PATIENT EDUCATION = Total hours patient
	education * total number of patients.
12	TOTAL HOURS PATIENT INFORMATION AND EDUCATION = Columns six
	and nine combined.
13	PERCENT OF VISIT TIME TO INFORMATION AND EDUCATION = Total
	visit hours information and education + total visit hours.
14	INFORMATION AND EDUCATION COST = Total time information and
	education X hourly wage of health care provider.
15	COST PER PATIENT FOR INFORMATION AND EDUCATION = Total number
	of patients : information and education costs.
16	SALARY FOR TOTAL VISIT HOURS = Hourly wage X total visit hours.
17	PERCENT OF SALARY TO INFORMATION AND EDUCATION = Salary for
	patient information and education + salary for total visit hours.
18	ACTUAL HOURS IN CLINIC = Actual time spent in a 40 hour week
	seeing patients.
19	NUMBER OF DIABETIC PATIENTS.
20	NUMBER OF HYPERTENSIVE PATIENTS.
21	NUMBER OF OBESE PATIENTS.
	HOUSEN OF OBEST INTENTS.

PRACTICE CLINIC PATTENT FAMILY P TABLE 1
BASELINE 13#09#AIION AND COST ANALYSIS PERTAINING TO PAII
EDUCATION, AI SELGÉED CLÍNICS, THE CUTVAIENT PAILLITY, AND PANI will outlander, Les, the

Information 6 Education	of Patient Total I of Josa   Cost per Total I for Info Citato Entities	Hrs Visit Cost Patient Visit and Educ Prs/72 3		0 0 2.6 5 5 65.26 (\$1355.40 5 16 2 12	0 0 0 0 0 0	0 0 13.5 25 276.06 1096.12 25 16 . 19		0 0 23.8 40 478.79 \$0.63 4 5365.53 40 64 9 48 11	10 16		2 .4 6.5 28 93.60 331.20 28 12 1.4 0 3	5 1.1   3.2   12 46.08   378.72   12 4 0 5 0	900	W		7 2.1 15.4 11 187.86 1633.58 11 36 57 199 25	16.0   52.8 63 644.16   1087.02 63   30 0 11	9.5 30.9 38	35 321.30 923.27 34 10	75 037 70 77	30:11	122 1 11 27 1 201	32.1 186.1 201	.4 6.4 1.86.1 201 1686.94 1.51 4938.50 201 152 89 357
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#### 2. SECTION II: SYSTEMS APPROACH METHODOLOGY.

#### a. Purpose.

(1) The following is a cost analysis of the Instructional Systems Design (ISD) process. This was accomplished in order to establish an information base for the developmental, investment, and recurrent costs of patient education currently being conducted by Project: PACOMED.

#### b. Development of Data Collection for Hypertension.

- (1) The information used for hypertension patient education was based on the optimum level of baseline knowledge needed by every hypertensive. (The optimum baseline knowlege was determined by the physician assigned, PACOMED Project Director, PACOMED staff, and a representative number of patients with the disease.) Enumerated were the costs of the educational hardware, software, administrative and personnel expenses necessary to operate the learning strategy. The time involved to administer the baseline learning strategy was approximately 50-60 minutes.
  - (2) Explanation. Model for Hypertension Patient Education.
- (a) Categories: Educational hardware, software, maintenance, administrative and personnel costs.
- (b) The developmental and investment costs of the educational hardware and software.
- (c) The computed cost per hour of the educational hardware and software. This required an estimate of the useful life of the educational hardware and software in terms of hours of operation. In this case, the estimate was that all of the educational hardware and software that was compared would last five years (minimum) or for 6,000 hours of operation. This was based on 30 hours per week, times 40 weeks per year for 5 years. Amortized for 6,000 hours of operation. 30 Hrs/Wk X 40 Wks/Yr X 5 Yrs = 6,000 Hrs.
- (d) It was also estimated that repairs and maintenance for each piece of equipment would cost one cent per unit hour.
- (e) Administrative costs are self explanatory, i.e., the developmental costs were based on the hourly wage of the personnel involved, plus the material costs.
- (f) Personnel. Based on the current military pay for rank, time in grade, time in service, quarters, subsistence, and fringe benefits. See Personnel Salaries, page 463.

<sup>&</sup>lt;sup>4</sup>Johnson, S.R. and Johnson, R.B., <u>Developing Individualized Instructional</u>
<u>Material</u> (Westinghouse Learning Press, Palo Alto, CA, 1970).

DATA COLLECTION

(g) See various categories. The total costs will depend on the various combinations used. For example, (Sub-total) educational hardware and software + (Sub-total) administrative costs + (Sub-total) personnel = total. See Developmental and Investment Costs, page 464.

#### DATA COLLECTION

#### HYPERTENSION

PERSONNEL	ANNUAL SALARY	COST PER HOUR
Health Educator*		
91C-91B		
E/7	\$16,928.40	\$8.40
E/5	11,575.90	5.75
E/4	9,876.00	4.90
		41.70
FOR COMPARATIVE PURPOSES		
Physician		
COL	\$50,551.30	\$25.10
LTC	41,214.00	20.45
MAJ	36,025.95	17.85
CPT	28,988.40	14.40
3/0	1.00.90	igust 660 aks
Nurse Clinician		
MAJ	\$24,588.00	\$12.20
CPT	19,018.55	9.45
1LT	15,264.00	7.55
But he live		A REPORT OF THE PROPERTY OF TH

<sup>\*</sup>The Health Educator can be an E/5 or E/4. An E/7 (SFC) has been utilized because of setting up a prototype system and conducting research.

#### (3) Findings.

- (a) In order to give one hypertensive patient optimum baseline knowledge, the developmental and investment costs for the educational hardware, software, and administrative expenses amounted to \$2,678.62. The recurrent cost of the educational hardware and software for one hour of baseline instruction was \$0.40 based on 30 Hrs/Wk X 40 Wks/Yr X 5 Yrs = 6,000 Hrs.
- (b) This, of course, did not mean that it would cost 40 cents per patient for one hour. The cost for the educational hardware and software remained 40 cents per hour for one patient, ten patients, or twenty patients. In addition, the paperwork to support the current system was 9 cents per patient. The cost of the learning laboratory technician was \$8.40 per hour. (This cost could easily be lowered by using an E/5 with over 4 years of service at \$5.75/Hr or an E/4 with over 2 years of service at \$4.90.) The total cost for one hour of instruction for one patient, using an E/7 (SFC) was \$8.89 and for ten patients, \$9.70.

#### HYPERTENSION

· HARDWARE	DEVELOPMENTAL AND INVESTMENT COSTS (Price per Unit)	RECURRENT COST PER HCUI
SONY Video Tape Recorder TV Monitor	\$884.30 487.00	\$0.147 .081
Headphones	13.68	.002
Listening Center	12.64	.002
DUKANE A/V Matic	236.00	.039
Maintenance	For each piece of equipment = 1¢/Unit Hour	.05
SUB-TOTAL	\$1,633.62	\$0.321*
SOFTWARE		
PACOMED Script (Advanced Organizer)	\$194.00	\$0.032
MEDFACT: General Info Hypertension	65.00	.011
PACOMED + BRADY: Sodium Restricted Diet	100.00	.016
PACOMED + BRADY: General Medications	100.00	.016
SUB-TOTAL	\$459.00	\$0.075*
TOTAL**		\$0.40
ADDITIONAL TRACKS		
MEDFACT: Weight Control Smoking	\$65.00 65.00	\$0.011***
ADMINISTRATIVE COSTS		
Developmental	\$454.00	(A) 
Typing & Reproduction	132.00	control of
Paperwork to Individualize Strategy	Nerth Ot no based 04.02 new no	\$0.09
SUB-TOTAL	\$586.00	\$0.09
TOTAL**	\$2,678.62	\$0.49

<sup>\*</sup>Cost per hour of educational hardware and software use remains a constant whether one patient, ten patients, or twenty patients are given the instruction.

<sup>\*\*</sup>Total costs rounded to the nearest cent.

<sup>\*\*\*</sup>Extra tracks to individualize as required, costs can be added as indicated.

# c. Development of Data Collection for Diabetes.

- (1) The information used for diabetic patient education was based on the optimum level of baseline knowledge needed by every diabetic. (The optimum baseline knowledge was determined by the physician assigned, PACOMED Project Director, PACOMED staff, and a representative number of patients with the disease.) Enumerated were the costs of the educational hardware, software, administrative and personnel expenses necessary to operate the learning strategy.
- (2) The time involved to administer the baseline learning strategy was approximately  $l_2^1$  hours to 2 hours for General Knowledge about Diabetes and Footcare. One and one half hours for Diabetic Diet and  $l_2^1$  hours for Insulin Therapy. This is about five times the length of time required for the hypertension baseline knowledge.
  - (3) Explanation. Model for Diabetic Patient Education.
- (a) Categories: Educational hardware, software, maintenance, administrative and personnel costs.
- (b) The developmental and investment costs of the educational hardware and software.
- (c) The computed cost per hour of the educational hardware and software. This required an estimate of the useful life of the educational hardware and software in terms of hours of operation. In this case, the estimate was that all of the educational hardware and software that was compared would last five years (minimum) or for 6,000 hours of operation. This was based on 30 hours per week, times 40 weeks per year for 5 years. Amortized for 6,000 hours of operation. 30 Hrs/Wk X 40 Wks/Yr X 5 Yrs = 6,000 Hrs.
- (d) It was also estimated that repairs and maintenance for each piece of equipment would cost one cent per unit hour.
- (e) Administrative costs are self explanatory, i.e., the developmental costs were based on the hourly wage of the personnel involved, plus the material costs.
- (f) Personnel. Based on the current military pay for rank, time in grade and time in service, quarters, subsistance, and fringe benefits. See Personnel Salaries, page 466.
- (g) Two additional columns were added to compute 2 and 5 hours of personnel costs. The extra time needed for the instructional units was only apparent in personnel costs. The reason for that was the strategies were an educational mix and none of the individual items of the educational hardware or software were in use for more than one hour at a time, except those documented. See Developmental and Investment Costs, page 467.

#### DIABETES

PERSONNEL	ANNUAL SALARY	COST PER HOUR	TOTAL COST FOR 3 UNITS OF INSTRUCTION (5 Hrs)
Health Educator 91C-91B			
E/7	\$16,928.40	\$8.40	\$42.00
E/5	11,572.90	5.75	28.75
E/4	9,876.00	4.90	24.50

#### (4) Findings.

- (a) In order to give one diabetic patient optimum baseline knowledge, the developmental and investment costs for educational hardware, software, and administrative expenses amounted to \$916.30. The recurrent cost of the educational hardware and software for five hours of baseline instruction was 59 cents based on 30 hours/wk X 40 weeks/yr X 5 years = 6,000 hours.
- (b) This did not mean that it would cost 59 cents per patient for five hours. The cost for the educational hardware and software remained 59 cents per hour for one pateint, ten patients, or twenty patients. In addition the paperwork to support the current system was 10 cents per patient. The cost of the learning laboratory technician was \$42.00 for 5 hours. (This cost could easily be lowered by using an E/5 with over 4 years of service at the pay rate of \$28.75/five hours or an E/4 with over 2 years of service at the pay rate of \$24.50/five hours.)
- (c) The total cost for five hours of instruction for one patient, using an SFC (E/7 over 18 years) was \$42.69 and for ten patients \$43.59 (90 cents additional for paperwork).

# DIABETES

	AL STATE OF THE PARTY OF THE PA		RECURRENT COST	NT COST
BARDWARE	DEVELOPMENTAL AND INVESTMENT COSTS (Price per Unit)	COST PEE HOUR	COST X 2 Hrs	TOTAL COST OF COMPLETE STRATECY (3 Units of Instruction) 5 Hours
SONY: Video Tape Recorder TV Monitor Headphones	Price per unit no longer need- ed to be added. Initial in- vestment cost was annotated under hypertension, Data Col- lection.	\$0.147	\$0.0\$	coules the coule of le party of a lide same something that need that need
DUKANE A/V Matic	A STATE OF THE STA	.039	.078	ineq shaer serie serie serie serie serie serie serie serie serie
Vaintenance	For each piece of equipment = 1c/Unit Hr	50.	.10	form material white white white white
SUB-TOTAL	-0-	\$0.321	\$0.186	\$0.51
SOFTWARE				
PACOMED Script	0	\$0.032	ida In	18 Por 18
MEDFACT: Diabetes Mellitus Diabetic Skin & Foot Care	\$65.00	9.6		
ADA: Acidosis & Insulin Reaction	2.65	.0002		
SUB-TOTAL	\$132.65	\$0.0522		\$0.05
MEDFACT: Diabetic Diet	\$65.00	\$0.01	100	10 10 10 10 10 10 10 10 10 10 10 10 10 1
ADA: Food Exchange	2.65	.0002	e l	6.1: (6.6: (6.6: (7.1) (6.7) (6.7) (6.7)
SUB-TOTAL	\$67.65	\$0.0102		\$0.01
MEDFACT: Insulin Therapy U-100 Insulin	\$65.00	\$0.01	0.588 0.588 0.588	200 (1) 200 (2) 30 (2) 30 (2) 202 (2) 202 (2) 202 (2)
SUB-TOTAL	\$130.00	\$0.02		\$0.02
TOTAL TOTAL		(	1.0	\$0.59
Developmental Typing 6 Reproduction	\$454.00	) . 23 97	5- (%) ) Dateal	r .(1) ca co ca ca ca duca du
Paperwork to Individualize Strategy	000	\$0.10		\$0.10
SUB-TOTAL	\$586.00	\$0.10		\$0.10
Isioi	\$916.30			\$0.69

# d. Development of Data Collection for Weight Control.

- (1) The information used for weight control patient education was based on the optimum level of baseline knowledge needed by every obese patient. (The optimum baseline knowledge was determined by the physician assigned, PACOMED Project Director, PACOMED staff, and a representative number of patients (30) with the problem.) Enumerated were the costs of the educational hardware, software, administrative and personnel expenses necessary to operate the learning strategy. The time involved to administer the baseline learning strategy was approximately two hours.
  - (2) Explanation. Model for Weight Control Patient Education.
- (a) Categories: Educational hardware, software, maintenance, administrative and personnel costs.
- (b) The developmental and investment costs of the educational hardware and software.
- (c) The computed cost per hour of the educational hardware and software. This required an estimate of the useful life of the educational hardware and software in terms of hours of operation. In this case, the estimate was that all of the educational hardware and software that was compared would last five years (minimum) or for 6,000 hours of operation. This was based on 30 hours per week, times 40 weeks per year for 5 years. Amortized for 6,000 hours of operation. 30 Hours/Wk X 40 Wks/Yr X 5 Yrs = 6,000 Hrs.
- (d) It was also estimated that repairs and maintenance for each piece of equipment would cost one cent per unit hour.
- (e) Administrative costs are self explanatory, i.e., the developmental costs were based on the hourly wage of the personnel involved, plus the material costs.
- (f) Personnel. Based on the current military pay for rank, time in grade and time in service, quarters, subsistance, and fringe benefits. See Personnel Salaries, page 469.
- (g) One additional column was added to compute 2 hours of personnel and educational hardware costs. The extra time needed for the instructional units were apparent in personnel and educational hardware costs. The reason for that was the strategies were an educational mix and none of the individual items of the educational software were in use for more than one hour at a time. See Developmental and Investment Costs, page 470.

#### WEIGHT CONTROL

PERSONNEL	ANNUAL SALARY	COST PER HOUR	TOTAL COST FOR 2 UNITS OF INSTRUCTION (2 Hrs)
Health Educator 91C-91B			
E/7	\$16,928.40	\$8.40	\$16.80
E/5	11,572.90	5.75	11.50
E/4	9,876.00	4.90	9.80

# (3) Findings.

- (a) In order to give one weight control patient optimum baseline knowledge the developmental and investment costs for the educational hardware, software, and administrative expenses amounted to \$1,017.50. The recurrent cost of the educational hardware and software for two hours of baseline instruction was 64 cents based on 30 Hrs/Wk X 40 Wks/Yr X 5 Yrs = 6,000 Hrs.
- (b) This did not mean that it would cost 64 cents per patient for two hours. The cost for the educational hardware and software remained 64 cents for two hours for one patient or ten patients. In addition, the paperwork to support the current system was 9 cents per patient. The cost of the learning laboratory technician was \$16.80 for two hours. (This cost could easily be lowered by using an E/5 with over 4 years of service at \$11.50 for 2 hours or an E/4 with over 2 years of service at \$9.80 for 2 hours. The total cost for one hour of instruction for one patient, using an E/7 (SFC) was \$9.13, and for ten patients \$9.94.

WEIGHT CONTROL

			RECURR	RECURRENT COSTS
HARDHARE	DEVELOPMENTAL AND INVESTMENT COSTS (Price per Unit)	COST PER HOUR	COST X 2 Hrs	TOTAL COST OF COMPLETE STRATEGY (2 Units of Instruction) 2 Hrs
SONY: Video Tape Recorder TV Monitor	Price per unit no longer need- ed to be added. Initial invest- ment cost was annotated under hypertension.	\$0.147	\$0.29	201 12 2012 10 2013 10 2013 10 2013 10
Headphones		700.	700.	30
Listening Center		.002	700.	
Maintenance	For each piece of equipment = 1c/Unit Hr	70.	90.	70
SUB-TOTAL	¢	\$0.26	\$0.54	\$0.54
SOFTWARE		10		)Cla
PACOMED Script	0	\$0.032		01
TIME LIFE VIDEO: Good Sense About Your Stomach	\$150.00	.025		
PACOMED VTR: Obesity	50.00	800*		go .
MEDFACT/PACOMED: Overweight	95.00	910.		
SUB-TOTAL	\$295.00	\$0.08		\$0.08
PACOMED: Physical Activity Food Exchange List	\$70.00	\$0.012		AC IN
SUB-TOTAL	\$136.50	\$0.02		\$0.02
TOTAL				\$9.0\$
ADMINISTRATIVE COSTS		(a) sali		
Developmental	\$454.00	1111		TV CY
Typing & Reproduction	132.00			
Paperwork to Individualize Strategy		80.09		8211
SUB-TOTAL	\$586.00	\$0.09		\$0.09
TOTAL	\$1017.50	0.0		\$0.73

# e. Development of Data Collection for Breast Self-Examination.

- (1) The information used for breast self-examination education was based on the optimum level of baseline knowledge needed by every woman. (The optimum baseline knowledge was determined by the physician assigned, PACOMED Project Director, PACOMED staff, and a representative number of women (30). Enumerated were the costs of the educational hardware, software, administrative and personnel expenses necessary to operate the learning strategy. The time involved to administer the baseline learning strategy was approximately one hour.
  - (2) Explanation. Model for Breast Self-Examination Education.
- (a) Categories: Educational hardware, software, maintenance costs, administrative and personnel costs.
- (b) The developmental and investment costs of the educational hardware and software.
- (c) The computed cost per hour of the educational hardware and software. This required an estimate of the useful life of the educational hardware and software in terms of hours of operation. In this case, the estimate was that all of the educational hardware and software that was compared would last five years (minimum) or for 6,000 hours of operation. This was based on 30 hours per week, times 40 weeks per year for 5 years. Amortized for 6,000 hours of operation. 30 Hrs/Wk X 40 Wks/Yr X 5 Yrs = 6,000 Hrs.
- (d) It was also estimated that repairs and maintenance for each piece of equipment would cost one cent per unit hour.
- (e) Administrative costs are self explanatory, i.e., the developmental costs were based on the hourly wage of the personnel involved, plus the material costs. See Developmental and Investment Costs, page 473.
- (f) Personnel. Based on the current military pay for rank, time in grade and time in service, quarters, subsistance, and fringe benefits. See Personnel Salaries, page 472.

# BREAST SELF-EXAMINATION

PERSONNEL	ANNUAL SALARY	COST PER HOUR
Health Educator		
91C-91B		
E/7	\$16,928.40	\$8.40
E/5	11,575.90	5.75
E/4	9,876.00	4.90

# (3) Findings.

- (a) In order to give one woman optimum baseline knowledge on breast self-examination the developmental and investment costs for the educational hardware, software, and administrative expenses amounts to \$978.00. The recurrent cost of the educational hardware and software for one hour of baseline instruction was 37 cents based on 30 hours/wk X 40 weeks/yr X 5 years = 6,000.
- (b) This of course, did not mean that it would cost 37 cents per patient for one hour. The cost for the educational hardware and software remained 37 cents per hour for one patient or ten patients. In addition, the paperwork to support the current system was 9 cents per patient. The cost of the learning laboratory technician was \$8.40 per hour. (This cost could easily be lowered by using an E/5 with over 4 years of service at \$5.75/Hr or an E/4 with over 2 years of service at \$4.90/Hr.) The total cost for one hour of instruction for one patient, using an E/7 (SFC) was \$8.86, and for ten patients, \$9.67.

# BREAST SELF-EXAMINATION

HARDWARE	DEVELOPMENTAL AND INVESTMENT COSTS (Price per Unit)	RECURRENT COST PER HOUF
SONY Video Tape Recorder TV Monitor	Price per unit no longer needed to be added. Initial investment cost was anno-	\$0.147 .081
Headphones	tated under hypertension.	.002
Listening Center	Caspel selfened self terainfe	.002
Maintenance	For each piece of equip- ment = lc/Unit Hour	.04
SUB-TOTAL	<u></u> 0-	\$0.27
SOFTWARE	newerness on Deigneralous ;	
PACOMED Script (Advanced Organizer)	0	\$0.032
PACOMED, OMNI/RVS SLIDES, & STUDY GUIDE: Introduction to Breast	of the trace of the following to the company of the	
Care	\$100.00	.017
OMNI: Teaching Breast Self-Exam	167.00	.028
OMNI: Betsi Breast Model	125.00	.020
SUB-TOTAL	\$392.00	\$0.10
TOTAL		\$0.37
ADMINISTRATIVE COSTS		
Developmental	\$454.00	
Typing & Reproduction	132.00	
Paperwork to Individualize Strategy	e dable ame remino fancistiba erroppisti apado errolasio	\$0.09
SUB-TOTAL	\$586.00	\$0.09
TOTAL	\$978.00	\$0.46

# f. Development of Data Collection for Family Planning.

(1) The information used for Family Planning Patient Education was based on the optimum level of baseline knowledge needed by every person wh was considering family planning. (The optimum baseline knowledge was determined by the physician assigned, PACOMED Project Director, PACOMED staff, and a representative number of patients (30) with the problem.) Enumerated were the costs of the educational hardware, software, administrative and personnel expenses necessary to operate the learning strategy. The time involved to administer the baseline learning strategy was approximately one hour.

# (2) Explanation.

- (a) Categories: Educational hardware, software, maintenance, adminstrative and personnel costs.
- (b) The developmental and investment costs of the educational hardware and software.
- (c) The computed cost per hour of the educational hardware and software. This required an estimate of the useful life of the educational hardware and software in terms of hours of operation. In this case, the estimate was that all of the educational hardware and software that was compared would last five years (minimum) or for 6,000 hours of operation. This was based on 30 hours per week, times 40 weeks per year for 5 years. Amortized for 6,000 hours of operation. 30 Hrs/Wk X 40 Wks/Yr X 5 Yrs = 6,000 Hrs.
- (d) It was also estimated that repairs and maintenance for each piece of equipment would cost one cent per unit hour.
- (e) Administrative costs are self explanatory, i.e., the developmental costs were based on the hourly wage of the personnel involved, plus the material costs.
- (f) Personnel. Based on the current military pay for rank, time in grade and time inservice, quarters, subsistance, and fringe benefits. See Personnel Salaries, page 475.
- (g) One additional column was added to compute 2 hours of personnel and educational hardware costs. The extra time needed for the instructional units were apparent in personnel and educational hardware costs. The reason for that was the strategies were an educational mix and none of the individual items of the educational software were in use for more than one hour at a time.

#### FAMILY PLANNING

PERSONNEL	ANNUAL SALARY	COST PER HOUR
Health Educator 91C-91B		
E/7	\$16,928.40	\$8.40
E/5	11,575.90	5.75
E/4	9,876.00	4.90

# (3) Findings.

- (a) In order to give one patient optimum baseline knowledge about family planning, the developmental and investment costs for the educational hardware, software, and administrative expenses amounted to \$1,010.00. The recurrent cost of the educational hardware and software for one hour of baseline instruction was 39 cents based on 30 Hrs/Wk X 40 Wks/Yr X 5 Yrs = 6,000 Hrs.
- (b) This, of course, did not mean that it would cost 39 cents per patient for one hour. The cost for the educational hardware and software remained 39 cents per hour for one patient or ten patients. In addition, the paperwork to support the current system was 8 cents per patient. The cost of the learning laboratory technician was \$8.40 per hour. (This cost could easily be lowered by using an E/5 with over 4 years of service at \$5.75/Hr or an E/4 with over 2 years of service at \$4.90/Hr.) The total cost for one hour of instruction for one patient, using an E/7 (SFC) was \$8.87, and for ten patients, \$9.59.

# FAMILY PLANNING

HARDWARE	DEVELOPMENTAL & INVESTMENT COSTS (Price per Unit)	RECURRENT COST PER HCUR
SONY: Video Tape Recorder TV Monitor	Price per unit no longer needed to be added. Initial investment cost was annotated under hypertension.	\$0.15 .08
Headphones	A MATER STREET	.002
		.002
Listening Center	For each piece of equip-	.002
Maintenance	ment = 1¢/Unit Hour	.04
SUB-TOTAL	-0-	\$0.27
SOFTWARE		
PACOMED Script		
(Advanced Organizer)	-0-	\$0.03
MEDFACT + PACOMED Family Planning	\$90.00	.02
MEDFACT + PACOMED I.U.D.	90.00	.02
MEDFACT + PACOMED The Pill (21 Day)	75.00	.01
MEDFACT + PACOMED The Pill (28 Day)	75.00	.01
MEDFACT + PACOMED Vasectomy	85.00	.01
MEDFACT + PACOMED The Rhythm Method	90.00	.02
SUB-TOTAL	\$505.00	\$0.12
TOTAL		\$0.39
ADMINISTRATIVE COSTS		
Developmental	\$373.00	
Typing & Reproduction	132.00	
Paperwork to Individualize Strategy		\$0.08
SUB-TOTAL	\$505.00	\$0.08
TOTAL	\$1,010.00	\$0.47

A

# g. Development of Data Collection for Vaginitis.

(1) The information used for Vaginitis Patient Education was based on the optimum level of baseline knowledge needed by every patient who had vaginitis. (The optimum baseline knowledge was determined by the physician assigned, PACOMED Project Director, PACOMED staff, and a representative number of patients (30) with the problem.) Enumerated were the costs of the educational hardware, software, administrative and personnel expenses necessary to operate the learning strategy. The time involved to administer the baseline learning strategy was approximately one-half hour.

# (2) Explanation.

- (a) Categories: Educational hardware, software, maintenance, administrative and personnel costs.
- (b) The developmental and investment costs for the educational hardware and software.
- (c) The computed cost per hour of the educational hardware and software. This required an estimate of the useful life of the educational hardware and software in terms of hours of operation. In this case, the estimate was that all of the educational hardware and software that was compared would last five years (minimum) or for 6,000 hours of operation. This was based on 30 hours per week, times 40 weeks per year for 5 years. Amortized for 6,000 hours of operation. 30 Hrs/Wk X 40 Wks/Yr X 5 Yrs = 6,000 Hrs.
- (d) It was also estimated that repairs and maintenance for each piece of equipment would cost one cent per unit hour.
- (e) Administrative costs are self explanatory, i.e., the developmental costs were based on the hourly wage of the personnel involved, plus the material costs. See Developmental and Investment Costs, page 479.
- (f) Personnel. Based on the current military pay for rank, time in grade and time in service, quarters, subsistence, and fringe benefits. See Personnel Salaries, page 478. The chart denotes only one-half hour, the length of time needed for the learning strategy.

#### VAGINITIS

PERSONNEL	ANNUAL SALARY	COST PER 1/2 HOUR
Health Educator 91C-91B		anostanniges (1)
E/7	\$16,928.40	\$4.20
E/5	11,575.90	2.88
E/4	9,876.00	2.45

# (3) Findings.

- (a) In order to give one patient optimum baseline know-ledge about Vaginitis, the developmental and investment costs for the educational hardware, software, and administrative expenses amounted to \$631.00. The recurrent cost of the educational hardware and software for one-half hour of baseline instruction was 16 cents based on 30 Hrs/Wk X 40 Wks/Yr X 5 Yrs = 6,000 Hrs.
- (b) This did not mean that it would cost 16 cents per patient for one-half hour. The cost for the educational hardware and software remains 16 cents per one-half hour for one patient or ten patients. In addition, the paperwork to support the current system would be 5 cents per patient. The cost of the learning laboratory technician was \$4.20 per one-half hour. (This cost could easily be lowered by using an E/5 with over 4 years of service at \$2.88/½ Hr or an E/4 with over 2 years of service at \$2.45/½ Hr.) The total cost for one-half hour of instruction for one patient, using an E/7 (SFC) was \$4.41, and for ten patients, \$4.86.

2

# VAGINITIS

HARDWARE	DEVELOPMENTAL & INVESTMENT COSTS (Price per Unit)	RECURRENT COST PER 1/2 HOUR
SONY: Video Tape Recorder TV Monitor	Price per unit no longer needs to be added. Initial investment cost was anno- tated under hypertension.	\$0.073 .04
Headphones	(main)	.001
Listening Center	Ceptiles: Ecalus ones herive	.001
Maintenance	For each piece of equip- ment = ½¢/Unit ½ Hour	.025
SUB-TOTAL	-0-	\$0.14
SOFTWARE	mired an evidence of the usa twave to terms of hours of	er stiff .exect?
PACOMED Script (Advanced Organizer)	robect Leaders who all 70 233 entre (alarme) a may ever 1 entre (alarme) -0-	\$0.016
PACOMED Vaginitis	\$45.00	.004
SUB-TOTAL	\$45.00	\$0.02
TOTAL	a (21a) ana sesara aybirrina) aka	\$0.16
ADMINISTRATIVE COSTS	a acta gradu ent de como e Art has Latheagolsvad sed	
Developmental	\$454.00	
Typing & Reproduction	132.00	
Paperwork to Individu- alize strategy	14 Authorst and tox benest 2	\$0.05
SUB-TOTAL	\$586.00	\$0.05
TOTAL	\$631.00	\$0.21

# h. Development of Data Collection for Low Back Pain.

(1) The information used for Low Back Pain Patient Education was based on the optimum level of baseline knowledge needed by every person with symptoms of low back pain. (The optimum baseline knowledge was determined by the physician assigned, PACOMED Project Director, PACOMED staff, and a representative number of patients (30) with the problem.) Enumerated were the costs of the educational hardware, software, administrative and personnel expenses necessary to operate the learning strategy. The time involved to administer the baseline learning strategy was approximately one-half hour.

# (2) Explanation.

- (a) Categories: Educational hardware, software, maintenance, administrative and personnel costs.
- (b) The developmental and investment costs for the educa-
- (c) The computed cost per hour of the educational hardware and software. This required an estimate of the useful life of the educational hardware and software in terms of hours of operation. In this case, the estimate was that all of the educational hardware and software that was compared would last five years (minimum) or for 6,000 hours of operation. This was based on 30 hours per week, times 40 weeks per year for 5 years. Amortized for 6,000 hours of operation. 30 Hrs/Wk X 40 Wks/Yr X
- (d) It was also estimated that repairs and maintenance for each piece of equipment would cost one cent per unit hour.
- (e) Administrative costs are self explanatory, i.e., the developmental costs were based on the hourly wage of the personnel involved, plus the material costs. See Developmental and Investment Costs, page 482.
- (f) Personnel. Based on the current military pay for rank, time in grade and time in service, quarters, subsistance, and fringe benefits. See Personnel Salaries, page 481. The chart denotes only one-half hour, the length of time needed for the learning strategy.

ACADEMY OF HEALTH SCIENCES (ARMY) FORT SAM HOUSTON TX--ETC F/G 6/5
STRATEGY FOR INSTRUCTIONAL SYSTEMS DESIGN AND FORMATIVE EVALUAT--ETC(U) AD-A070 921 JUL 76 D H KUCHA UNCLASSIFIED HCSD-79-001-B NL 6 of 7 AD A070921 ŧ U - Schaffer

#### LOW BACK PAIN

PERSONNEL	ANNUAL SALARY	COST PER ½ HOUR
Health Educator		
91C-91B		
E/7	\$16,928.40	\$4.20
E/5	11,575.90	2.88
E/4	9,876.00	2.45

#### (3) Findings.

- (a) In order to give one patient optimum baseline know-ledge about low back pain, the developmental and investment costs for the educational hardware, software, and administrative expenses amounts to \$460.00. The recurrent cost of the educational hardware and software for one-half hour of baseline instruction was 16 cents based on 30 Hrs/Wk X 40 Wks/Yr X 5 Yrs = 6,000 Hrs.
- (b) This did not mean that it would cost 16 cents per patient for one-half hour. The cost for the educational hardware and software remained 16 cents per one-half hour for one patient or ten patients. In addition, the paperwork to support the current system was 5 cents per patient. The cost of the learning laboratory technician was \$4.20 per one-half hour. (This cost could easily be lowered by using an E/5 with over 4 years of service at  $$2.88/\frac{1}{2}$$  Hr or an E/4 with over 2 years of service at  $$2.45/\frac{1}{2}$$  Hr.) The total cost for one-half hour of instruction for one patient, using an E/7 (SFC) was \$4.41, and for ten patients, \$4.86.

# LOW BACK PAIN

RETTOTALES ATAC

HARDWARE	DEVELOPMENTAL & INVESTMENT COSTS (Price per Unit)	RECURRENT COST PER 1/2 HOUR
SONY: Video Tape Recorder TV Monitor	Price per unit no longer needs to be added. Initial investment cost was anno- tated under hypertension.	\$0.07 .04
Headphones	01.859,818	.001
Listening Center	05/322/31	.001
Maintenance	For each piece of equip- ment = ½c/Unit ½ Hour	.025
SUB-TOTAL	-0-	\$0.13
SOFTWARE		arbars (8)
PACOMED Script (Advanced Organizer)	-0-	\$0.016
TIME/LIFE : Backache	\$150.00	.01
SUB-TOTAL	\$150.00	\$0.03
TOTAL		\$0.16
ADMINISTRATIVE COSTS	tons vicinianomi dutument ag	to sail all
Developmental	\$230.00	
Typing & Reproduction	80.00	
Paperwork to Individu- alize strategy		\$0.05
SUB-TOTAL	\$310.00	\$0.05
TOTAL	\$460.00	\$0.21

# i. Development of Data Collection for Child Growth and Development.

(1) The information used for Child Growth and Development Patient Education was based on the optimum level of baseline knowledge needed by every parent. (The optimum baseline knowledge was determined by the physician assigned, PACOMED Project Director, PACOMED staff, and a representative number of parents (30).) Enumerated were the costs of the educational hardware, software, administrative and perosnnel expenses necessary to operate the learning strategy. The time involved to administer the baseline learning strategy was approximately one hour.

# (2) Explanation.

- (a) Categories: Educational hardware, software, maintenance, administrative and personnel costs.
- (b) The developmental and investment costs of the educational hardware and software.
- (c) The computed cost per hour of the educational hardware and software. This required an estimate of the useful life of the educational hardware and software in terms of hours of operation. In this case, the estimate was that all of the educational hardware and software that was compared would last five years (minimum) or 6,000 hours of operation. This was based on 30 hours per week, times 40 weeks per year for 5 years. Amortized for 6,000 hours of operation. 30 Hrs/Wk X 40 Wks/Yr X 5 Yrs = 6,000 Hrs.
- (d) It was also estimated that repairs and maintenance for each piece of equipment would cost one cent per unit hour.
- (e) Administrative costs are self explanatory, i.e., the developmental costs were based on the hourly wage of the personnel involved, plus the material costs. See Developmental and Investment Costs, page 485.
- (f) Personnel. Based on the current military pay for rank, time in grade and time in service, quarters, subsistence, and fringe benefits. See Personnel Salaries, page 484.
- (g) See various categories. The total costs will depend on the various combinations used. For example, (Sub-total) educational hardware and software + (Sub-total) administrative costs + (Sub-total) personnel = total.

#### CHILD GROWTH AND DEVELOPMENT

PERSONNEL	ANNUAL SALARY	COST PER HOUR
Health Educator 91C-91B		
E/7	\$16,928.40	\$8.40
E/5	11,575.90	5.75
E/4	9,876.00	4.90

# (3) Findings.

- (a) In order to give patients optimum baseline knowledge on Child Growth and Development (Birth to 3 Yrs of Age), the developmental and investment costs for the educational hardware, software, and administrative expenses amounted to \$633.00. The recurrent cost of the educational hardware and software for one hour of baseline instruction was 34 cents based on 30 Hrs/Wk X 40 Wks/Yr X 5 Yrs = 6,000 Hrs.
- (b) This did not mean that it would cost 34 cents per patient for one hour. The cost for the educational hardware and software remained 34 cents per hour for one patient or ten patients. In addition, the paperwork to support the current system was 6 cents per patient. The cost of the learning laboratory technician was \$8.40 per hour. (This cost could easily be lowered by using an E/5 with over 4 years of service at \$5.75/Hr or an E/4 with over 2 years of service at \$4.90/Hr.) The total cost for one hour of instruction for one patient, using an E/7 (SFC) was \$8.80, and for ten patients, \$9.34.

# CHILD GROWTH AND DEVELOPMENT

	DEVELOPMENTAL AND INVESTMENT	RECURRENT
HARDWARE	COSTS (Price per Unit)	COST PER HOUR
SONY: Video Tape Recorder TV Monitor	Price per unit no longer needs to be added. Initial investment cost was anno- tated under hypertension.	\$0.15 .08
Headphones	3 3 3 3	.002
Listening Center	For each piece of equip-	.002
Maintenance	ment = 1¢/Unit Hour	.04
SUB-TOTAL	-0-	\$0.27
SOFTWARE	8 8 8 8	8 8
PACOMED Script (Advanced Organizer)	~0~	\$0.03
PARENTS MAGAZINE + PACOMED Birth to One One to Two Two to Three	\$250.00	.04
SUB-TOTAL	\$250.00	\$0.07
TOTAL		\$0.34
ADMINISTRATIVE COSTS		
Developmental	\$236.00	8 8 8
Typing & Reproduction	120.00	
Paperwork to Individualize Strategy		\$0.06
SUB-TOTAL	\$383.00	\$0.06
TOTAL	\$633.00	\$0.40

# SUMMARY OF COST ANALYSIS FOR THE EIGHT LEARNING SYSTEMS

	DEVELOPMENTAL AND	TENTAL AND IN	INVESTMENT COSTS	RECURRENT CO	COSTS	PERSONNEL	COSTS
LEARNING SYSTEM	HARDWARE	SOFTWARE	ADMINISTRATIVE	HARDWARE/SOFTWARE	PAPERWORK	PER SYSTEM	
Hypertension	\$1,633.62	\$459.00	\$586.00	\$0.40	\$ .09	E/7 E/5 E/4	\$ 8.40
Diabetes	-0-	\$330.30	\$586.00	\$0.59	\$0.10	E/7 = E/5 = E/4 = E/4	\$42.00 28.75 24.50
Weight Control	0	\$431.50	\$586.00	\$0.64	80.09	E/7 = E/5 = E/4 = =	\$16.80
Breast Self-Exam	-0-	\$392.00	\$586.00	\$0.37	80.09	E/7 = E/5 = E/4 = =	\$ 8.40
Family Planning	-0-	\$505.00	\$505.00	\$0.39	\$0.08	E/7 = E/5 = E/4	\$ 8.40 5.75 4.90
Vaginitis	-0-	\$ 45.00	\$586.00	\$0.16	\$0.0\$	E/7 = E/5 = E/4 =	\$ 4.20 2.88 2.45
Low Back Pain	-6	\$150.00	\$310.00	\$0.16	\$0.05	E/7 = E/5 = E/4	\$ 4.20 2.88 2.45
Child Growth & Development	þ	\$250.00	\$383.00	\$0.34	\$0.06	E/7 E/5 E/4	\$ 8.40 5.75 4.90
	-688)	A syaci	Table 1 Street 1 Stre	T-405	qbasii Astat 1	SONA	

# APPENDIX 10

ENLISTED HEALTH EDUCATOR(S) FUNCTIONS AND ACCOMPANYING SYSTEM NARRATIVES FOR THE EIGHT TOPIC AREAS

#### ENLISTED HEALTH EDUCATOR'S FUNCTIONS TO ADMINISTER THE PROTOTYPE SYSTEMS

To Perform the Prototype Functions of the Health Educator/Learning Laboratory Technician:

- . Introduces PACOMED to professional staff and gives inservice on systems utilization when appropriate.
- . Schedules all patients.
- . Meets all patients as they enter PACOMED area.
- . Provides a brief overview of the learning experience.
- . Obtains necessary demographic data.
- . Completes the Questionnaire to Individualize Instruction.
- . Shows the Project: PACOMED Introductory Script.
- Administers the pre-test for the first learning package. (Depending upon individual program being viewed, patients may complete as many as three pre/post-tests.)
- . Presents the learning objectives.
- . Shows the A/V program indicated on the Questionnaire to Individualize Instruction.
  - . Grades pre-test during A/V presentation.
- . Administers post-test for the first learning package.
  - . Rewinds film and/or prepares for the second A/V presentation.
- . Provides the patient with the Process Evaluation Form.
  - . Grades post-test during completion of the process evaluation.
- Interviews patients individually to: obtain additional baseline information, review pre/post-tests, provides further explanations as necessary etc.
- . Schedules for follow-up visits.
- . Prepares lab for next scheduled use: rewinds film, rearranges furniture, sharpens pencils, prepares paperwork, etc.
- . Maintains high standards of cleanliness in the learning laboratory to ensure a comfortable and eye appealing setting.
- . Responsible for opening and securing learning laboratory.

# INCLOSURE 1

BEALTH C.AS ETHNISS DIVINION ACADAMY OF HER IN SCIENCES FOR LOI STORY TRANS 78214

Hypertensive Systems

PROJECT: PACOMED
HEALTH CARE STUDIES DIVISION
ACADEMY OF HEALTH SCIENCES
FORT SAM HOUSTON, TEXAS 78234

Hypertensive Systems

The systems flow chart is a step by step, logical approach to be used when giving the patient the instructional strategy. The symbols on the following page are to be used to facilitate following the systematic flow and functions of the chart. Accompanying the symbols is a narrative explaining each occurence and its meaning. Each block, without exception, must be completed before moving to the next step/block. This is to insure following the proper sequence when giving the patient the instructional strategy.

#### SYSTEMS FLOW CHART LEGEND

FORT BAN HOUSTON, TRAVAS 1823A

PROCESS BOX: Indicates that a specific function is to occur before the next action in the system takes place. DECISION BOX: Lists the decision made, and directs the flow according to the decision. DOCUMENT BOX: Document to be filled out and retained as a permanent record. PUNCH CARD BOX: Collected data punched for computer. TERMINAL SYMBOL: Marks the end of system. BRANCHING SYMBOL: Indicates a sub-system or branch of main system. Sub-system can be located by reference number or letter inside the circle. A symbol can also be used to mark a continuance of the system from one page to the next in the natural flow of the system.

# PROJECT: PACOMED HEALTH CARE STUDIES DIVISION ACADEMY OF HEALTH SCIENCES FORT SAM HOUSTON, TEXAS 78234

# Hypertensive System Narrative

- 1.0 Initial contact is made with the physician or nurse clinician.

  If indicated the physician or nurse clinician refers the patient to PACOMED (Patient Learning Center) for health education in Hypertension.
- 2.0 Patient is contacted by mail. Telephonic follow-up is made to set up an appointment.
- 3.0 Health educator will meet patient(s) as they enter PACOMED area.
- 4.0 Fill out Demographic Data Form.
- 5.0 Fill out Questionnaire to Individualize Instruction.
- 6.0 Show video tape introducing Project: PACOMED.
  Software: Sony A/V tape
  Hardware: Sony playback and TV receiver
- 7.0 Administer the Pre-test for Hypertensive Information.
- 8.0 Show the behavioral objectives for Hypertensive Information. (The instruction is geared to meet the objectives. Inform the patient that these are the special areas he/she should be concerned about learning.)
- 9.0 Show the learning track for Hypertensive Information.
  Software: MedFact Hypertension
  Hardware: Dukane A/V Matic
  Headphones
- 10.0 Administer the Post-test for Hypertensive Information.
- 11.0 Decision: Did patient successfully complete the Post-test?

NO:

- 11.1 Health educator will counsel the patient to determine which areas need reinforcement.
- 11.2 Supplemental materials are given to the patient. Return to Block 9.0.

Hypertensive System Narrative

\*YES: Continue to Block 12.0.

- 12.0 Administer Pre-test for Low Sodium Diet.
- 13.0 Show the behavioral objectives for the Low Sodium Diet.
- 14.0 Show the learning track for the Low Sodium Diet.
  Software: Sony A/V tape
  Hardware: Sony playback and TV receiver
- 15.0 Administer the Post-test for the Low Sodium Diet.
- 16.0 Decision: Did the patient successfully complete the Post-test?
  - 16.1 Health educator will counsel the patient to determine which areas need reinforcement.
  - 16.2 Supplemental materials are given to the patient. Return to Block 14.0.

YES: Continue to Block 17.0.

- 17.0 Administer the Pre-test for General Medications.
- 18.0 Show the behavioral objectives for General Medications.
- 19.0 Show the learning track for General Medications.
  Software: Sony A/V tape
  Hardware: Sony playback and TV receiver
- 20.0 Administer the Post-test for General Medications.
- 21.0 Decision: Did the patient successfully complete the Post-test?
  NO:
  - 21.1 Health educator will counsel the patient to determine which areas need reinforcement.
- \*NOTE: After the patient has successfully completed the learning track to the 80% competency level, each post-test score will be entered on the Patient Baseline Data and Follow-up Form.

### Hypertensive System Narrative

- 21.2 Supplemental materials are given to the patient. Return to Block 19.0.
- YES: Continue to Block 22.0.
- 22.0 Fill out the Patient Baseline Data and Follow-up Form.
  - 22.1 Record results.
  - 22.2 Code for computer.
- 23.0 Schedule for follow-up, if needed.
- 24.0 Fill out and send Physician Feedback Form. Terminate System.

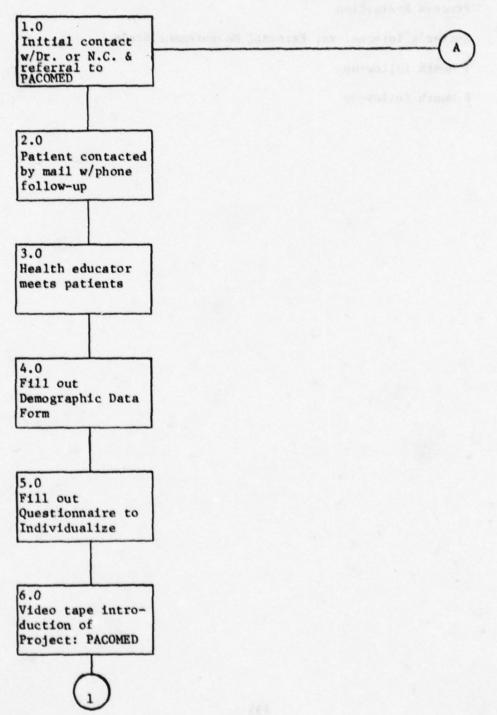
Hypertensive System Narrative

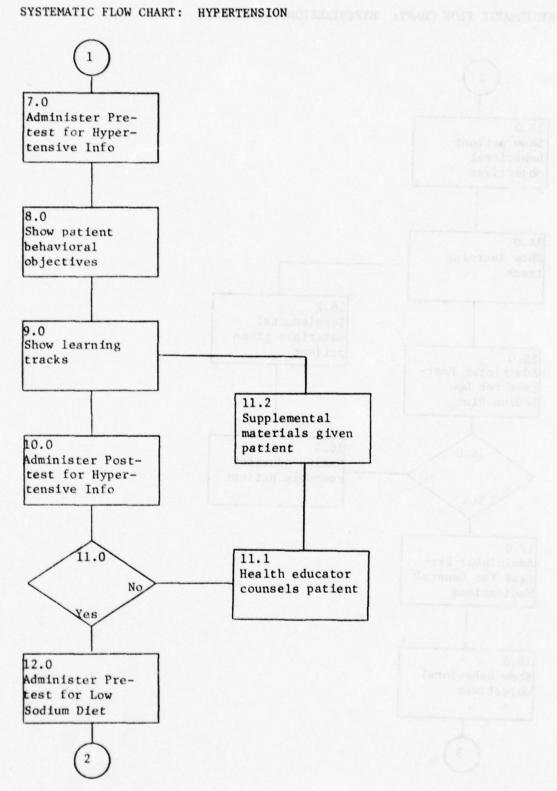
Additional procedures are needed due to the nature of the project:

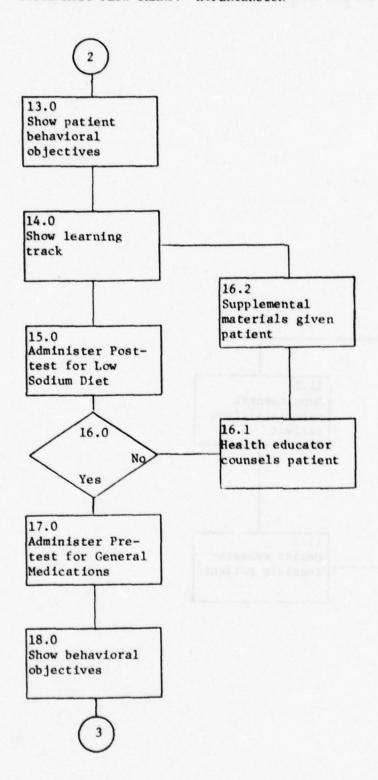
Process Evaluation

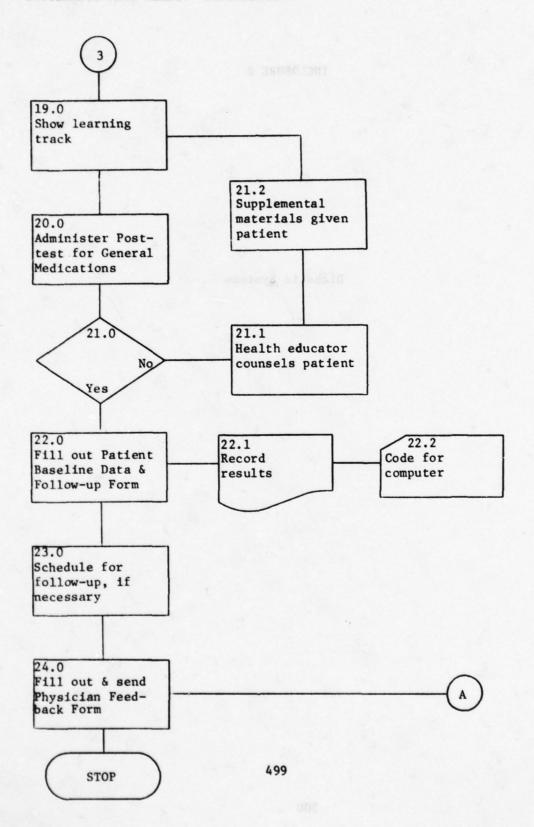
Rotter's Internal vs. External Measurement Scale

- 1 Month follow-up
- 6 Month follow-up









INCLOSURE 2

Diabetic Systems

Diabetic Systems

The systems flow chart is a step by step, logical approach to be used when giving the patient the instructional strategy. The symbols on the following page are to be used to facilitate following the systematic flow and functions of the chart. Accompanying the symbols is a narrative explaining each occurence and its meaning. Each block, without exception, must be completed before moving to the next step/block. This is to insure following the proper sequence when giving the patient the instructional strategy.

### SYSTEMS FLOW CHART LEGEND

90 13 1706 07 07 LEST	PROCESS BOX: Indicates that a specific function is to occur before the next action in the system takes place.
No.	DECISION BOX: Lists the decision made, and directs the flow according to the decision.
	DOCUMENT BOX: Document to be filled out and retained as a permanent record.
	PUNCH CARD BOX: Collected data punched for computer.
	TERMINAL SYMBOL: Marks end of system.
	BRANCHING SYMBOL: Indicates a sub-system or branch of main system. Sub-system can be located by reference number or letter inside circle. A symbol can also be used to make a continuance of the system from one page to the next in the natural flow of the system.

Diabetic System Narrative: Session I

- 1.0 Initial contact is made with the physician or nurse clinician. If indicated, the physician or nurse clinician refers the patient to PACOMED (Patient Learning Center) for health education in Diabetes.
- 2.0 Patient is contacted by mail. Telephonic follow-up is made to set up an appointment.
- 3.0 Health educator will make initial contact with patient(s) as they enter the PACOMED area.
- 4.0 Fill out Demographic Data Form.
- 5.0 Fill out Questionnaire to Individualize Instruction.
- 6.0 Administer Opinion Scale.
- 7.0 Show the video tape introducing Project: PACOMED.

  Software: Sony A/V tape

  Hardware: Sony playback & TV receiver
- 8.0 Administer Pre-test for Diabetes Information.
- 9.0 Show the behavioral objectives for the Diabetes Information. (The instruction is geared to meet the objectives. Inform the patient that these are the special areas he/she should be concerned about learning.)
- 10.0 Show the learning tracks for the General Diabetes Instruction.

  Software: MedFact Introduction to Diabetic Care

ADA - Learning About Diabetes

Insulin Reaction & Diabetic Acidosis

(pp. 24-39)

MedFact - Foot and Skin Care

Hardware: Dukane A/V Matic

Headphones

- 11.0 Administer the Post-test for Diabetes Information.
- 12.0 Decision: Did the Patient successfully complete the Post-test?

Diabetic System Narrative: Session I

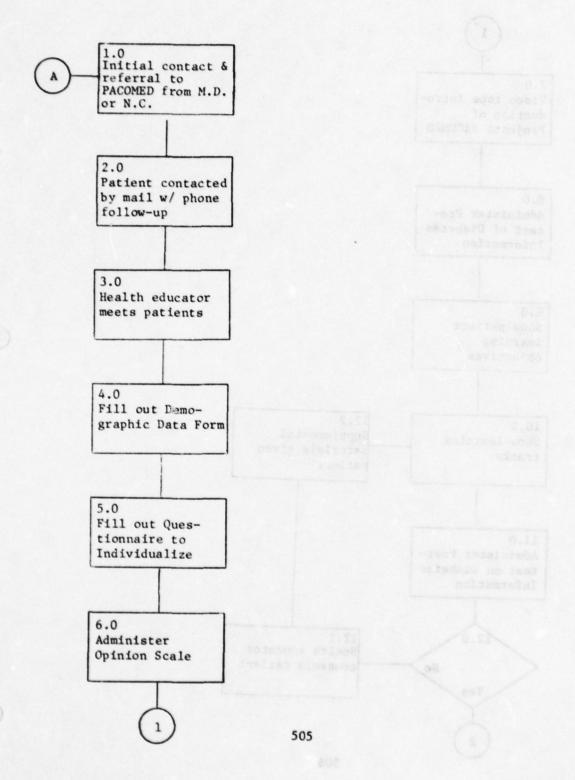
NO:

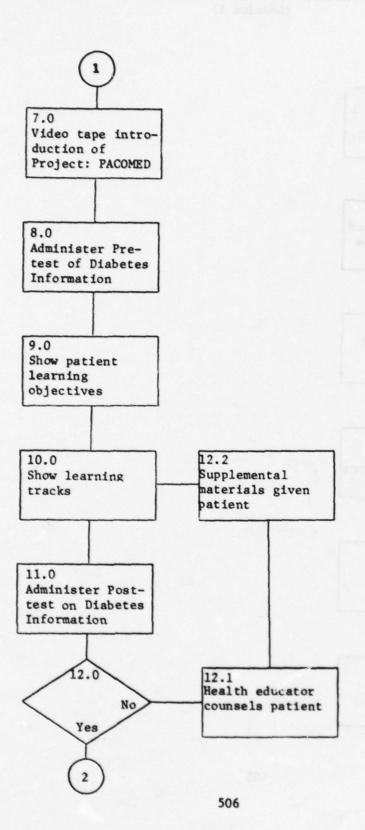
- 12.1 Health educator will counsel the patient to determine the areas which need reinforcement.
- 12.2 Supplemental materials provided and return to Block 10.0.

YES: Continue to Block 13.0.

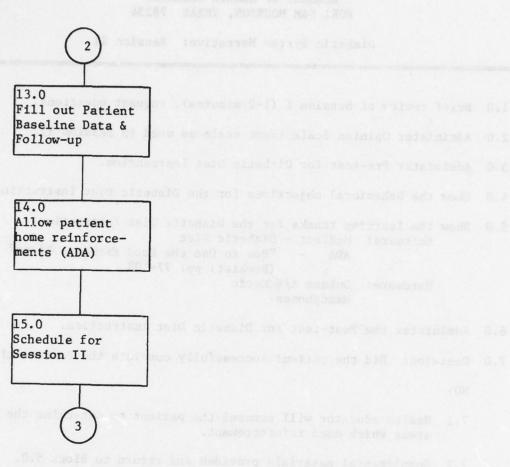
- 13.0 Fill out Patient Baseline Data and Follow-up sheet.
- 14.0 Allow patient to take the ADA "Learning about Diabetes" home for reinforcement.
- 15.0 Schedule for Session II.

<sup>\*</sup>NOTE: After the patient has successfully completed the learning track to the 80% competency level, each post-test score will be entered on the Patient Baseline Data and Follow-up Form.





### SYSTEMATIC FLOW CHART: DIABETES (Session I)



11.6 Econolist tor S month and 6 oracle followings and tertained evention.

#### Diabetic System Narrative: Session II

- 1.0 Brief review of Session I (1-2 minutes), request questions.
- 2.0 Administer Opinion Scale (Same scale as used in Session I).
- 3.0 Administer Pre-test for Diabetic Diet Instruction.
- 4.0 Show the behavioral objectives for the Diabetic Diet Instruction.
- 5.0 Show the learning tracks for the Diabetic Diet Instruction.

Software: MedFact - Diabetic Diet

ADA - "How to Use the Food Exchange Lists"

(Booklet) pp. 77-103

Hardware: Dukane A/V Matic Headphones

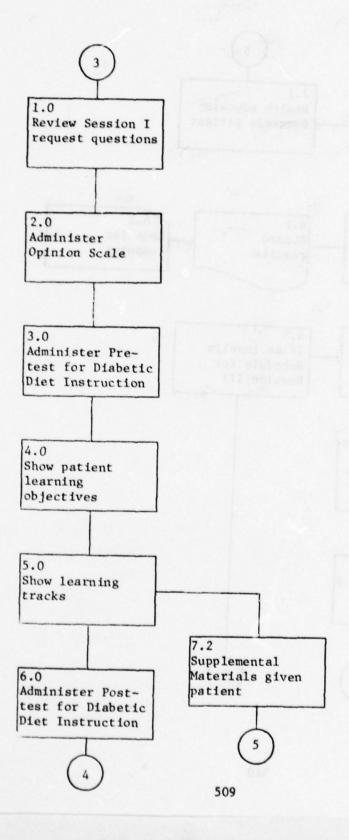
- 6.0 Administer the Post-test for Diabetic Diet Instruction.
- 7.0 Decision: Did the patient successfully complete the Post-test?
  - 7.1 Health educator will counsel the patient to determine the areas which need reinforcement.
  - 7.2 Supplemental materials provided and return to Block 5.0.

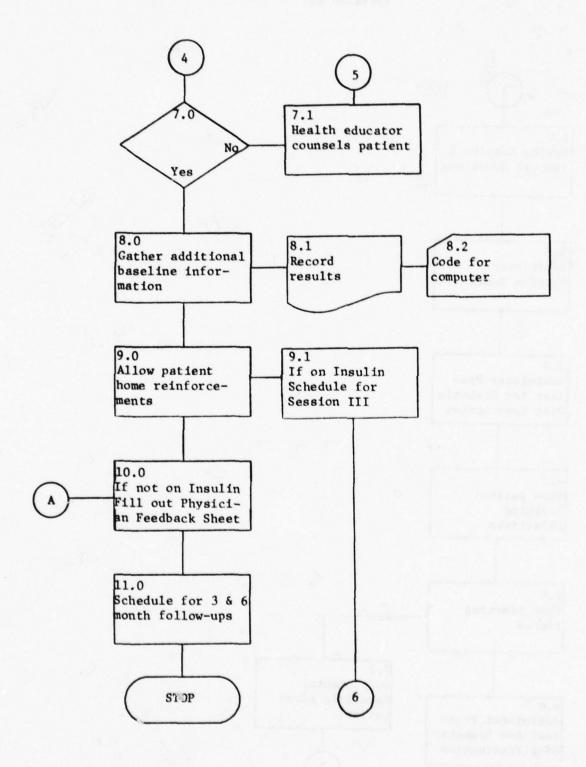
YES: Continue to Block 8.0.

- 8.0 Gather additional baseline information, if indicated.
  - 8.1 Record results

NO:

- 8.2 Code for computer
- 9.0 Allow patient to take supplemental materials home if indicated.
  - 9.1 If on insulin, schedule for Session III.
- 10.0 If not on insulin, fill out Physician Feedback Sheet.
- 11.0 Schedule for 3 month and 6 month follow-ups and terminate system.





Diabetic System Narrative: Session III

- 1.0 Brief review of Session II (1-2 minutes), request questions.
- 2.0 Administer Pre-test for Self-Injection of Insulin.
- 3.0 Show behavioral objectives for Self-Injection of Insulin.
- 4.0 Show learning tracks for Self-Injection of Insulin.

Software: MedFact - Insulin Therapy

- U-40 or U-80 ADA

Hardware: Dukane A/V Matic

Headphones

5.0 If on U-100, show U-100 learning track.

Software: MedFact - U-100 Hardware: Dukane A/V Matic

Headphones

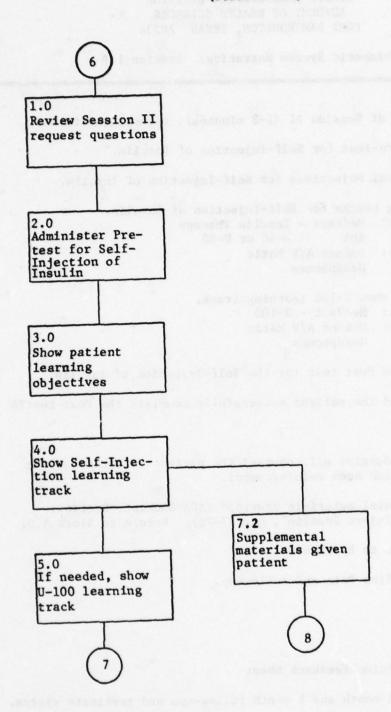
- 6.0 Administer the Post-test for the Self-Injection of Insulin.
- 7.0 Decision: Did the patient successfully complete the Post-test?

NO:

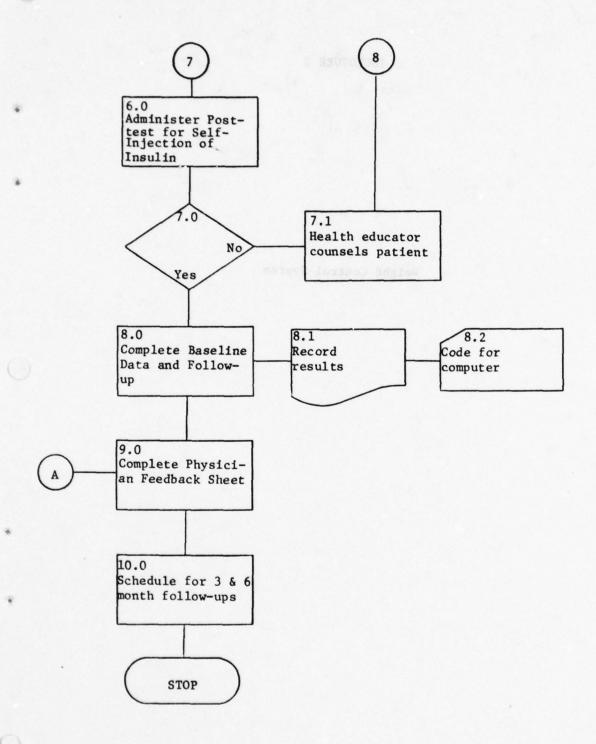
- 7.1 Health educator will counsel the patient to determine the areas which need reinforcement.
- Supplemental materials provided (ADA Booklet, Section: "How to Inject Insulin", pp. 47-76). Return to Block 4.0.

YES: Continue to Block 8.0.

- 8.0 Complete Baseline Data and Follow-up.
  - 8.1 Record
  - 8.2 Code
- 9.0 Complete Physician Feedback Sheet
- 10.0 Schedule for 3 month and 6 month follow-ups and terminate system.



### SYSTEMATIC FLOW CHART: DIABETES (Session III)



INCLOSURE 3

Weight Control System

Weight Control System

The systems flow chart is a step by step, logical approach to be used when giving the patient the instructional strategy. The symbols on the following page are to be used to facilitate following the systematic flow and functions of the chart. Accompanying the symbols is a narrative explaining each occurence and its meaning. Each block, without exception, must be completed before moving to the next step/block. This is to insure following the proper sequence when giving the patient the instructional strategy.

### SYSTEMS FLOW CHART LEGEND

28.23V	PROCESS BOX: Indicates that a specific function is to occur before the next action in the system takes place.
No	DECISION BOX: Lists the decision made, and directs the flow according to the decision.
	DOCUMENT BOX: Document to be filled out and retained as a permanent record.
	PUNCH CARD BOX: Collected data punched for computer.
	TERMINAL SYMBOL: Marks the end of the system.
0	BRANCHING SYMBOL: Indicates a sub-system or branch of main system. Sub-systems can be located by reference numbers or letters inside the circle. A symbol can also be used to mark a continuance of the system from one page to the next in the natural flow of the system.

#### Weight Control System Narrative - Session I

- 1.0 Initial contact is made with the physician, nurse clinician or dietitian. If indicated the physician, nurse clinician or dietitian refers the patient to PACOMED (Patient Learning Center) for health education in Weight Control.
- 2.0 Patient is contacted by telephone to set up an appointment.
- 3.0 Health Educator will meet patient(s) as they enter PACOMED area.
- 4.0 Health Educator will familiarize the patient(s) with the Privacy Act Statement.
- 5.0 Fill out Demographic Data Form.
- 6.0 Fill out Questionnaire to Individualize Instruction. Health Educator will be sure to indicate the calorie restriction suggested on the referral form by the health care provider.
- 7.0 Show video tape recording introducing Project: PACOMED

  Software: 3/4 inch video tape recording
  Hardware: Sony video tape playback unit and television receiver
- 8.0 Administer the Pre-test for Weight Control Information.
- 9.0 Decision: Did the patient pass the pre-test?

YES: Go to circle "A"

NO: Continue on to block 10.0

- 10.0 Show the patient(s) the learning objectives for Weight Control Information. (The instruction is geared to meet the objectives. Inform the patient that these are the special areas he/she should be concerned about learning.)
- 11.0 Show the learning track "Good Sense About Your Stomach"
  Software: Time/Life Video Tape
  Hardware: Sony video playback unit and television receiver.
- 12.0 Administer the Compulsive Eating Scale.
- 13.0 Show the learning track "Introduction and Concepts About Weight Control".

Software: Video Tape Recording -- PACOMED.

Hardware: Sony video playback unit and television receiver.

### Weight Control System Narrative - Session I

- 14.0 Show the learning track "Calorie Expenditure and Introduction to Physical Activity".

  Software: Video tape recording (MedFact/PACOMED).

  Hardware: Sony video playback unit and television receiver.
- 15.0 Administer post-test for Weight Control Information.
- 16.0 DECISION: Did the patient pass the test?

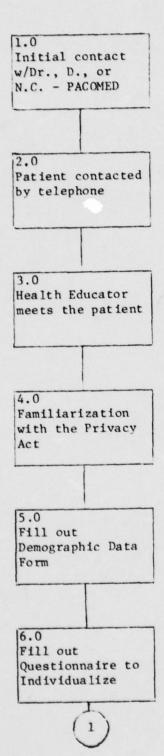
YES: Continue to block 17.0

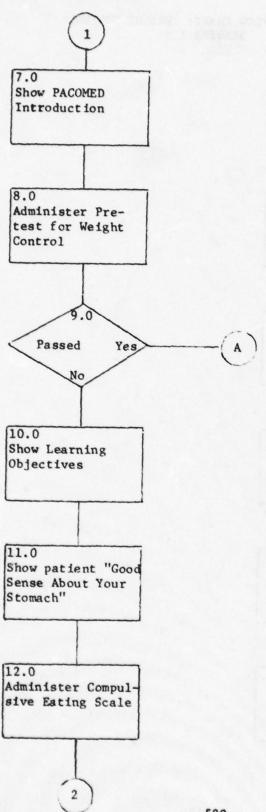
NO: Health Educator will counsel the patient to determine which areas need reinforcement. Refer the patient back to block 13.0.

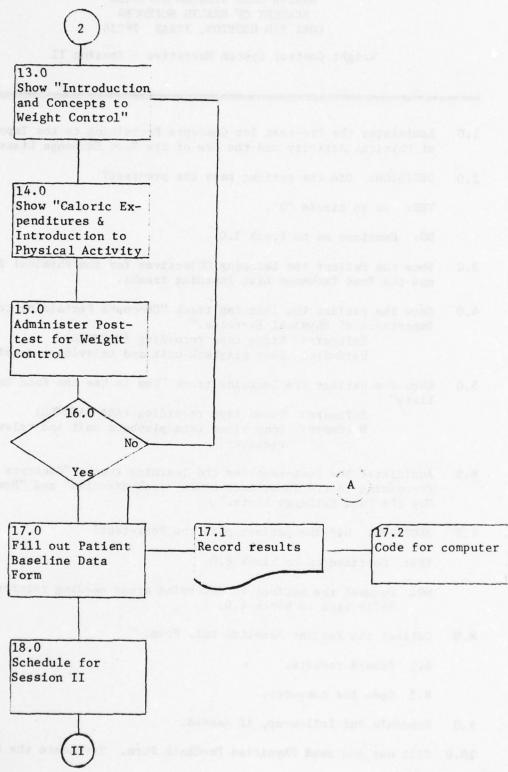
- 17.0 Fill out Patient Baseline Data Form
  - 17.1 Record results
  - 17.2 Code for computer.
- 18.0 Schedule patient(s) for Session II.

\*NOTE: After the patient has successfully completed the learning track to the 80% competency level, each post-test score will be entered on the Patient Baseline Data and Follow-up Form.

### SYSTEMATIC FLOW CHART: WEIGHT CONTROL SESSION I







#### Weight Control System Narrative - Session II

- 1.0 Administer the Pre-test for Concepts Pertaining to the Importance of Physical Activity and the Use of the Food Exchange Lists.
- 2.0 DECISION: Did the patient pass the pre-test?

YES: Go to circle "B".

NO: Continue on to block 3.0.

- 3.0 Show the Patient the Learning Objectives for the Physical Activity and the Food Exchange List learning tracks.
- 4.0 Show the patient the learning track "Concepts Pertaining to the Importance of Physical Exercise."

  Software: Video tape recording (PACOMED)

  Hardware: Sony playback unit and television receiver.
- 5.0 Show the patient the learning track "How to Use the Food Exchange Lists"

Software: Video tape recording (ADA-PACOMED)

Hardware: Sony video tape playback unit and television

receiver

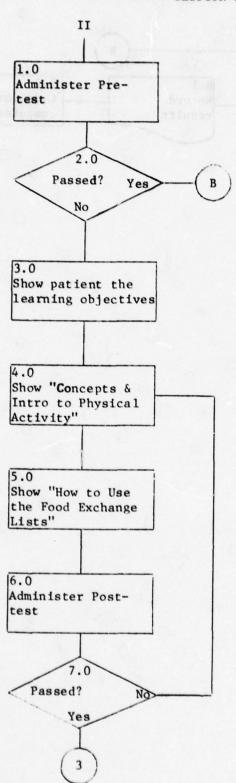
- 6.0 Administer the Post-test for the learning tracks "Concepts Pertaining to the Importance of Physical Exercise" and "How to Use the Food Exchange Lists."
- 7.0 DECISION: Did the patient pass the Post-test?

YES: Continue on to block 8.0

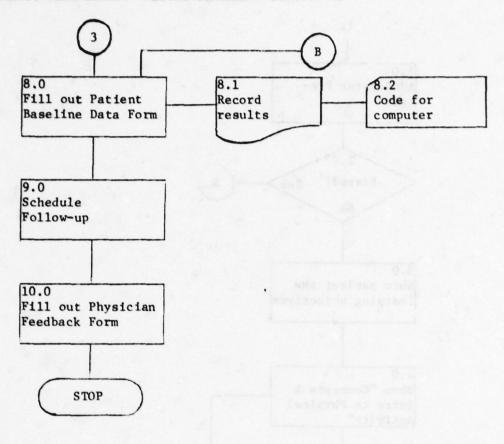
NO: Counsel the patient to determine areas needing reinforcement. Refer back to block 4.0.

- 8.0 Collect the Patient Baseline Data Form.
  - 8.1 Record results.
  - 8.2 Code for computer.
- 9.0 Schedule for follow-up, if needed.
- 10.0 Fill out and send Physician Feedback Form. Terminate the system.

### SYSTEMATIC FLOW CHART: WEIGHT CONTROL SESSION II



### SYSTEMATIC FLOW CHART: WEIGHT CONTROL - SESSION II



### INCLOSURE 4

Breast Self-Examination System

Breast Self-Examination System

The systems flow chart is a step by step, logical approach to be used when giving the patient the instructional strategy. The symbols on the following page are to be used to facilitate following the systematic flow and functions of the chart. Accompanying the symbols is a narrative explaining each occurence and its meaning. Each block, without exception, must be completed before mowing to the next step/block. This is to insure following the proper sequence when giving the patient the instructional strategy.

#### SYSTEMS FLOW CHART LEGEND

PROCESS BOX: Indicates that a specific function is to occur before the next action in the system takes place. DECISION BOX: Lists the decision made, and directs the flow according to the decision. DOCUMENT BOX: Document to be filled out and retained as a permanent record. PUNCH CARD BOX: Collected data punched for computer. TERMINAL SYMBOL: Marks end of system. BRANCHING SYMBOL: Indicates a sub-system or branch of main system. Sub-system can be located by reference number or letter inside circle. A symbol can also be used to make a continuance of the system from one page to the next in the natural flow of the system.

#### Breast Self-Examination System Narrative

- 1.0 Initial contact is made with the physician or nurse clinician. If indicated, the physician or nurse clinician refers the patient to PACOMED (Patient Learning Center) for health education in Breast Self-Examination.
- 2.0 Patient is contacted by telephone to set up an appointment.
- 3.0 Health Educator meets patient(s) as they enter PACOMED area.
- 4.0 Patient is familiarized with the Privacy Act Statement.
- 5.0 Fill out Demographic Data Form.
- 6.0 Fill out Questionnaire to Individualize Instruction.
- 7.0 Show the video tape introducing Project: PACOMED.
  Software: Sony A/V tape
  Hardware: Sony playback & TV receiver
- 8.0 Administer the pre-test for Breast Self-Examination Information.
- 9.0 Decision: Did the patient successfully complete the pre-test?

YES: Advance to block 17.0 or Circle B.

NO: Continue to block 10.0.

- 10.0 Show the behavioral objectives for Breast Self-Examination
- 11.0 Show the learning track for: Breast Anatomy and Examination Software: Sony A/V tape
  Hardware: Sony playback & TV receiver
- 12.0 Show the learning track for: Teaching Breast Self-Examination Software: Sony A/V tape
  Hardware: Sony playback & TV receiver
- 13.0 Administer the post-test for Breast Self-Examination Information.
- 14.0 Decision: Did the patient successfully complete the post-test?

NO: Refer back to Block 10.0.

YES: Continue to Block 15.0

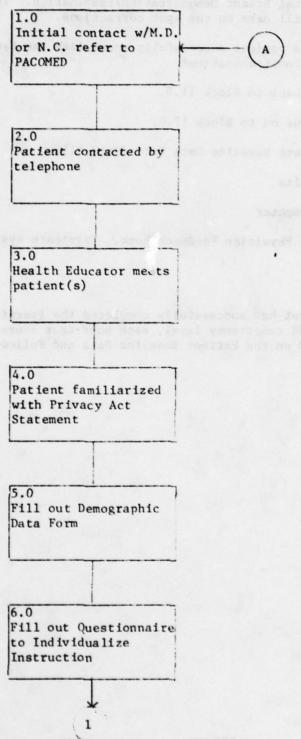
### Breast Self-Examination System Narrative

- 15.0 Administer the Betsi Breast Demonstration/Examination. The Health Educator will make on the spot corrections.
- 16.0 Decision: Did the patient successfully accomplish the Betsi Breast Demonstration/Examination?

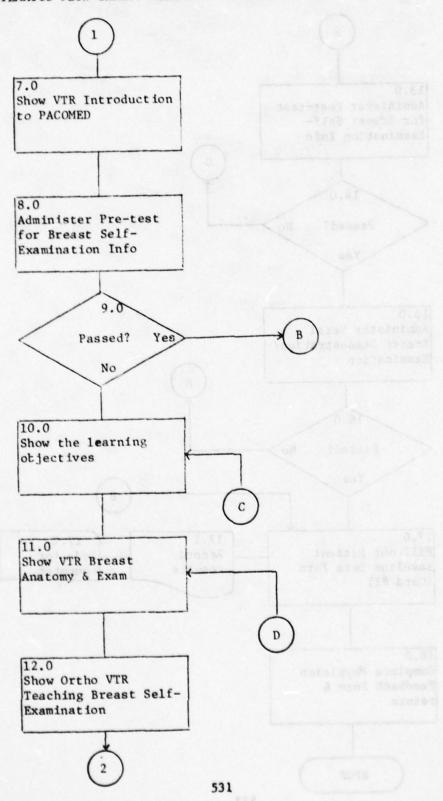
NO: Refer back to Block 11.0.

YES: Continue on to Block 17.0.

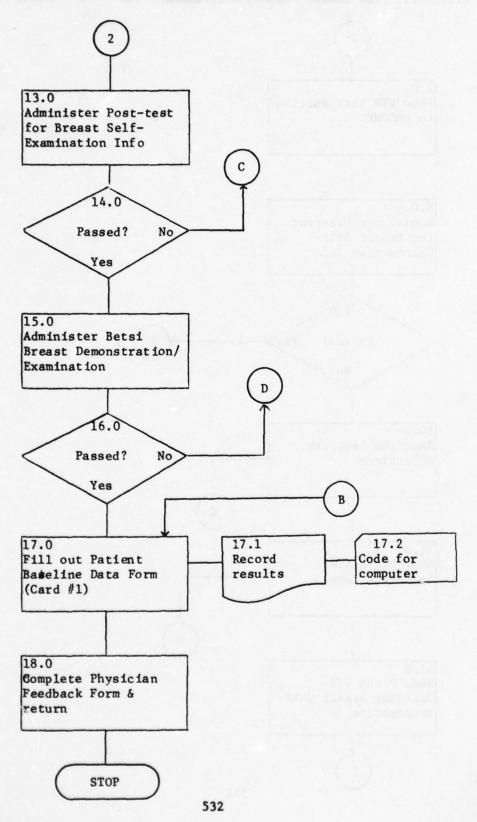
- 17.0 Fill out the Patient Baseline Data Form (Card #1).
  - 17.1 Record results
  - 17.2 Code for computer
- 18.0 Fill out and send Physician Feedback Form. Terminate system.
- \*NOTE: After the patient has successfully completed the learning track to the 80% competency level, each post-test score will be entered on the Patient Baseline Data and Follow-up Form.



SYSTEMATIC FLOW CHART: BREAST SELF-EXAMINATION



### SYSTEMATIC FLOW CHART: BREAST SELF-EXAMINATION



### INCLOSURE 5

Family Planning System

Family Planning System

The systems flow chart is a step by step, logical approach to be used when giving the patient the instructional strategy. The symbols on the following page are to be used to facilitate following the systematic flow and functions of the chart. Accompanying the symbols is a narrative explaining each occurence and its meaning. Each block, without exception, must be completed before moving to the next step/block. This is to insure following the proper sequence when giving the patient the instructional strategy.

#### SYSTEMS FLOW CHART LEGEND

PROCESS BOX: Indicates that a specific function is to occur before the next action in the system takes place. DECISION BOX: Lists the decision made, and directs the flow according to the decision. DOCUMENT BOX: Document to be filled out and retained as a permanent record. PUNCH CARD BOX: Collected data punched for computer. TERMINAL SYMBOL: Marks the end of system. BRANCHING SYMBOL: Indicates a sub-system or branch of main system. Sub-system can be located by reference number or letter inside the circle. A symbol can also be used to mark a continuance of the system from one page to the next in the natural

flow of the system.

#### Family Planning System Narrative

- 1.0 Initial contact is made with the physician or nurse clinician. If indicated, the physician or nurse clinician will refer the patient to PACOMED (Patient Learning Center) for health education in Family Planning.
- 2.0 Patient is contacted by mail. Telephonic Follow-up is made to set up an appointment.
- 3.0 Health Educator will meet the patient(s) as they enter the PACOMED area.
- 4.0 Patient is briefed on the Privacy Act Statement.
- 5.0 Fill out the Demographic Data Sheet.
- 6.0 Fill out the Questionnaire to Individualize Instruction.
- 7.0 Show video tape introducing Project: PACOMED

Software: Video Tape Cassette Hardware: Sony receiver/playback unit

- 8.0 Administer the pre-test for Family Planning Information.
- 9.0 DECISION: Did the patient successfully complete the pretest?

YES: Proceed to Block 14.0

NO: Proceed to Block 10.0

10.0 Show the behavioral objectives for Family Planning. (The instruction is geared to meet the objectives. Inform the patient that these are the special areas he/she should be concerned about learning.)

#### Family Planning System Narrative

- 11.0 Show the learning tracks necessary as indicated by the Questionnaire to Individualize Instruction:
  - A) Introduction to Family Planning
  - B) Intra Uterine Device IUD
  - C) Vasectomy
  - D) The Rhythm Method
  - E) The Birth Control Pill (21/28 Day)

Software: Video tape cassette Hardware: Sony receiver/playback unit

- 12.0 Administer the post-test for Family Planning Information
- 13.0 DECISION: Did the patient successfully complete the post-test?

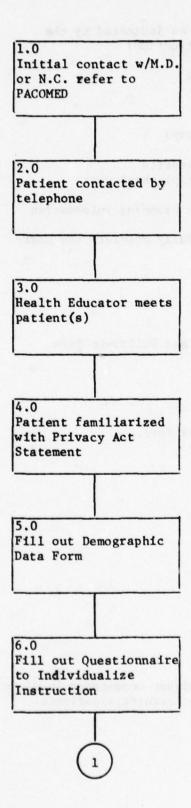
NO: Return to Block 10.0

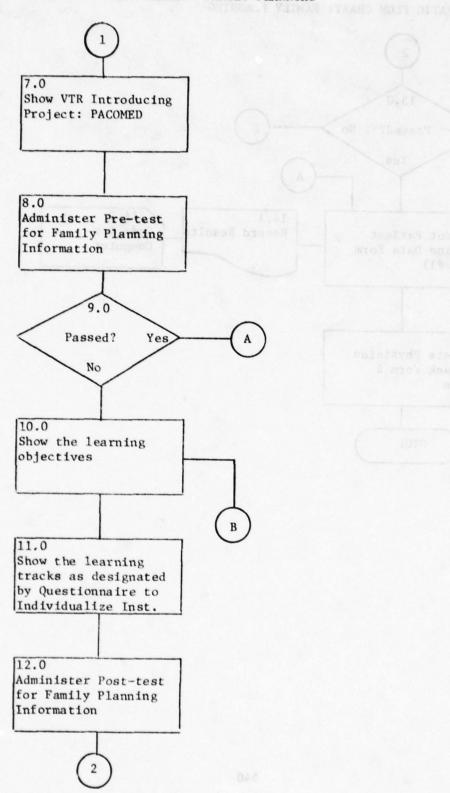
YES: Continue to Block 14.0

- 14.0 Fill out the Patient Baseline Data and Follow-Up Form.
  - 14.1 Record the results
  - 14.2 Code for computer.
- 15.0 Fill out and send Physician Feedback Form.

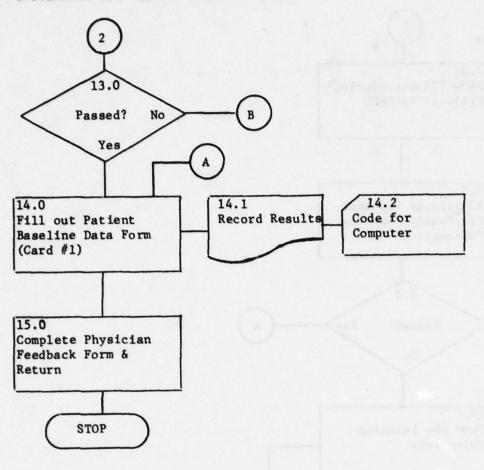
TERMINATE SYSTEM

NOTE: The patient must reach an 80% or higher competency level in order to successfully complete the learning experience.





#### SYSTEMATIC FLOW CHART: FAMILY PLANNING



# INCLOSURE 6

Vaginitis System

Vaginitis System

The systems flow chart is a step by step, logical approach to be used when giving the patient the instructional strategy. The symbols on the following page are to be used to facilitate following the systematic flow and functions of the chart. Accompanying the symbols is a narrative explaining each occurence and its meaning. Each block, without exception, must be completed before moving to the next step/block. This is to insure following the proper sequence when giving the patient the instructional strategy.

#### SYSTEMS FLOW CHART LEGEND

PROCESS BOX: Indicates that a specific function is to occur before the next action in the system takes place. DECISION BOX: Lists the decision made, and directs the flow according to the decision. DOCUMENT BOX: Document to be filled out and retained as a permanent record. PUNCH CARD BOX: Collected data punched for computer. TERMINAL SYMBOL: Marks the end of system. BRANCHING SYMBOL: Indicates a sub-system or branch of main system. Sub-system can be located by reference number or letter inside the circle. A symbol can also be used to mark a continuance of the system from one page to the next in the natural flow of the system.

#### Vaginitis System Narrative

- 1.0 Initial contact is made with the physician or the nurse clinician. If indicated, the physician or nurse clinician refers the patient to PACOMED (Patient Learning Center) for health education for vaginitis.
- 2.0 Patient is contacted by mail. Telephonic follow-up is made to set up an appointment.
- 3.0 Health Educator will meet patient(s) as they enter PACOMED area.
- 4.0 Health Educator will familiarize the patient(s) with the Privacy Act Statement.
- 5.0 Fill out the Demographic Data Form.
- 6.0 Fill out the Questionnaire to Individualize.
- 7.0 Show video tape introducing Project: PACOMED

Software: Video tape cassette Hardware: Sony receiver/playback unit

- 8.0 Administer the pre-test for Vaginitis.
- 9.0 Decision: Did the patient successfully complete the pre-test?

Yes: Proceed to Block 14.0.

No: Proceed to Block 10.J.

- 10.0 Show the patient the behavioral objectives. (The instruction is geared to meet the objectives. Inform the patient that these are the special areas he/she should be concerned about learning.)
- 11.0 Show the patient(s) the video tape cassette entitled: Vaginitis.

Software: Video tape cassette Hardware: Sony receiver/playback unit

12.0 Administer the post-test for Vaginitis Information.

#### Vaginitis System Narrative

13.0 Decision: Did the patient successfully complete the post-test?

No: Return to Block 10.0.

Yes: Continue to Block 14.0.

14.0 Fill out the Patient Baseline Data and Follow-Up Forms.

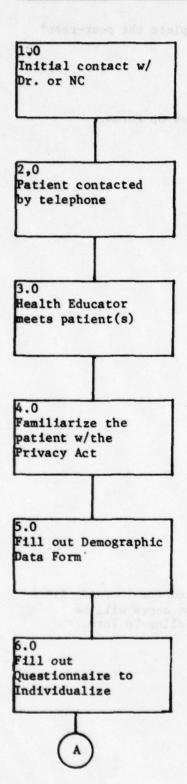
14.1 Record the results.

14.2 Code for computer.

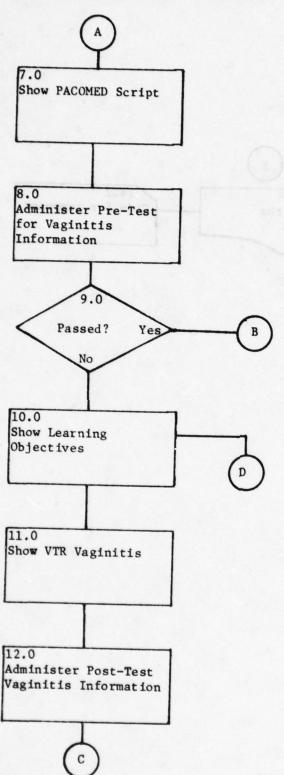
15.0 Fill out and send Physician Feedback Form.

TERMINATE SYSTEM

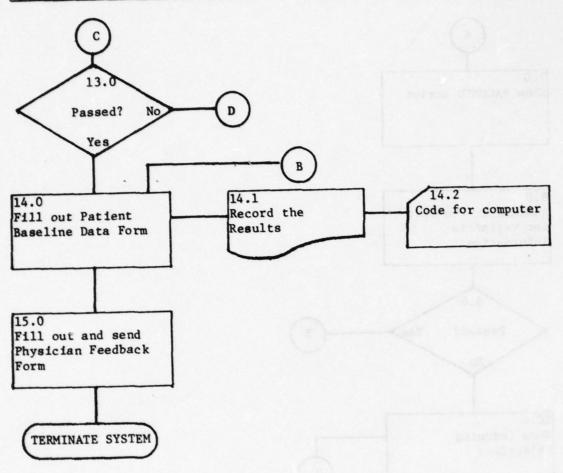
NOTE: After the patient has successfully completed the learning track to the 80% competency level, each post-test score will be entered on the Patient Baseline Data and Follow-Up Form.



### Systematic Flow Chart: Vaginitis



### Systematic Flow Chart: Vaginitis



#### INCLOSURE 7

Child Growth and Development System

Child Growth and Development System

The systems flow chart is a step by step, logical approach to be used when giving the patient the instructional strategy. The symbols on the following page are to be used to facilitate following the systematic flow and functions of the chart. Accompanying the symbols is a narrative explaining each occurrence and its meaning. Each block, without exception, must be completed before moving to the next step/block. This is to insure following the proper sequence when giving the patient the instructional strategy.

#### SYSTEMS FLOW CHART LEGEND

PROCESS BOX: Indicates that a specific function is to occur before the next action in the system takes place. DECISION BOX: Lists the decision made, and directs the flow according to the decision. DOCUMENT BOX: Document to be filled out and retained as a permanent record. PUNCH CARD BOX: Collected data punched for computer. TERMINAL SYMBOL: Marks the end of system. BRANCHING SYMBOL: Indicates a sub-system or branch of main system. Sub-system can be located by reference number or letter inside the circle. A symbol can also be used to mark a continuance of the system from one page to the next in the natural

flow of the system.

#### Child Growth & Development System Narrative

- 1.0 Initial contact is made with the physician or the nurse clinician. If indicated, the physician or nurse clinician refers the patient to PACOMED (Patient Learning Center) for health education for child growth and development.
- 2.0 Patient is contacted by mail. Telephonic follow-up is made to set up an appointment.
- 3.0 Health Educator will meet patient(s) as they enter PACOMED area.
- 4.0 Health Educator will familiarize the patient(s) with the Privacy Ace Statement.
- 5.0 Fill out the Demographic Data Form.
- 6.0 Fill out the Questionnaire to Individualize .
- 7.0 Show video tape introducing Project: PACOMED

Software: Video tape cassette
Hardware: Sony receiver/playback unit

- 8.0 Administer the pre-test for Child Growth and Development: Birth to Year One.
- 9.0 Decision: Did the patient successfully complete the pre-test?

Yes: Proceed to Block 14,0

No: Continue to Block 10.0

- 10.0 Show the patient the behavioral objectives. (The instruction is geared to meet the objectives. Inform the patient that these are the special areas he/she should be concerned about learning.)
- 11.0 Show the patient(s) the video tape cassette entitled: Birth to Year One.

Software: Video tape cassette

Hardware: Sony receiver/playback unit

12.0 Administer the post-test for Child Growth and Development: Birth to Year One.

#### Child Growth & Development System Narrative

13.0 Decision: Did the patient successfully complete the post-test?

No: Return to Block 10.0

Yes: Continue to Block 14.0

- 14.0 Administer the pre-test for Child Growth and Development: Year One to Year Two.
- 15.0 Decision: Did the patient successfully complete the pre-test?

Yes: Proceed to Block 20.0

No: Continue to Block 16.0

- 16.0 Show the patient the behavioral objectives
- 17.0 Show the patient(s) the video tape cassette entitled: Year One to Year Two.

Software: Video tape cassette Hardware: Sony receiver/playback unit

- 18.0 Administer the post-test for Child Growth and Development: Year One to Year Two.
- 19.0 Decision: Did the patient successfully complete the post-test?

No: Return to Block 16.0

Yes: Continue to Block 20.0

- 20.0 Administer the pre-test for Child Growth and Development: Year Two to Year Three.
- 21.0 Decision: Did the patient successfully complete the pre-test?

Yes: Proceed to Block 26.0

No: Continue to Block 22.0

- 22.0 Show the patient the behavioral objectives
- 23.0 Show the patient(s) the video tape cassette entitled: Year Two to Year Three.

Software: Video Tape Cassette

Hardware: Sony receiver/playback unit

#### Child Growth & Development System Narrative

- 24.0 Administer Post-test for Child Growth and Development: Year Two to Year Three.
- 25.0 Decision: Did the patient successfully complete the post-test?

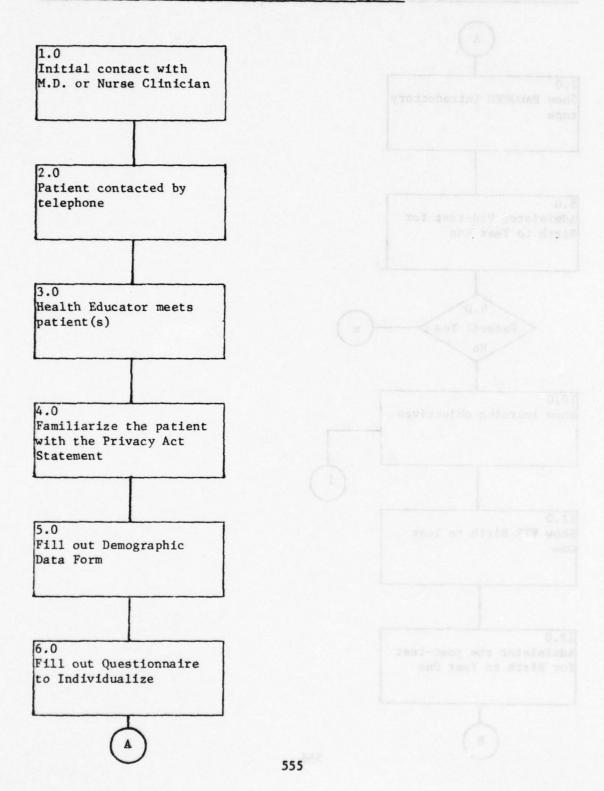
No: Return to Block 22.0

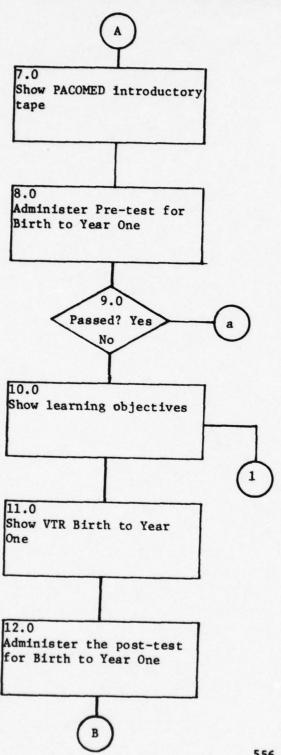
Yes: Continue to Block 26.0

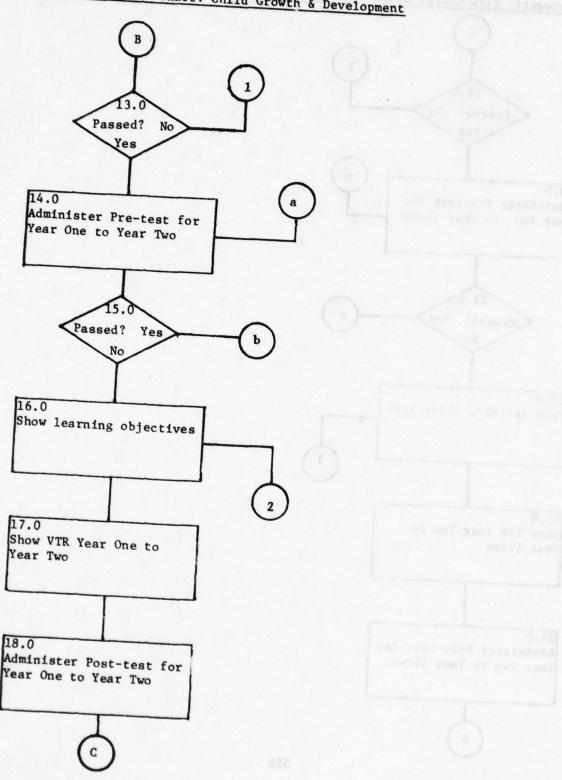
- 26.0 Fill out the Patient Baseline Data and Follow-up Forms.
  - 26.1 Record the results.
  - 26.2 Code for computer.
- 27.0 Fill out and send Physician Feedback Form.

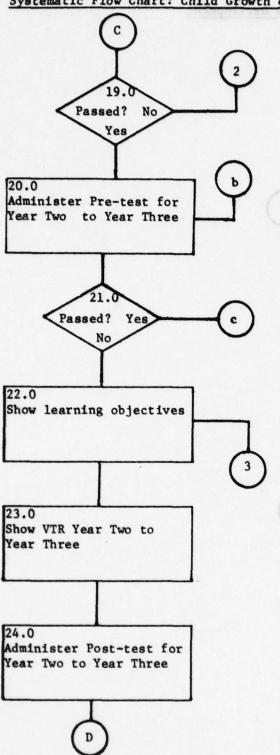
TERMINATE SYSTEM

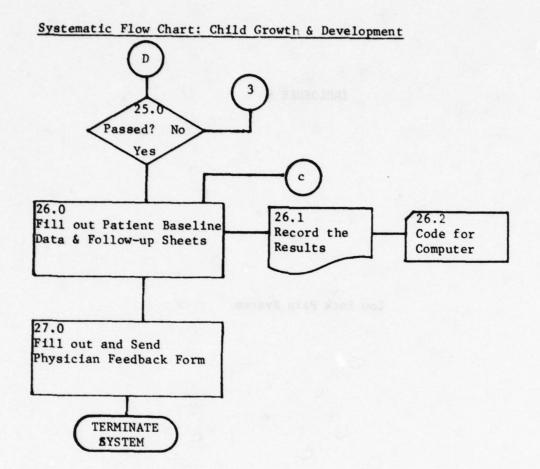
NOTE: After the patient has successfully completed the learning track to the 80% competency level, each post-test score will be entered on the Patient Baseline Data and Follow-up Form.











INCLOSURE 8

Low Back Pain System

Low Back Pain System

The systems flow chart is a step by step, logical approach to be used when giving the patient the instructional strategy. The symbols on the following page are to be used to facilitate following the systematic flow and functions of the chart. Accompanying the symbols is a narrative explaining each occurrence and its meaning. Each block, without exception, must be completed before moving to the next step/block. This is to insure following the proper sequence when giving the patient the instructional strategy.

### SYSTEMS FLOW CHART LEGEND

	nigrate and other spiece of the spiece.
2.0	PROCESS BOX: Indicates that a specific function is to occur before the next action in the system takes place.
of at donorma Isol	got again we gote a at tipeds work continue off
No	DECISION BOX: Lists the decision made, and directs the flow according to the decision.
	DOCUMENT BOX: Document to be filled out and retained as a permanent record.
	PUNCH CARD BOX: Collected data punched for computer.
	TERMINAL SYMBOL: Marks the end of system.
0	BRANCHING SYMBOL: Indicates a sub-system or branch of main system. Sub-system can be located by reference number or letter inside the circle. A symbol can also be used to mark a continuance of the system from one page to the next in the natural flow of the system.

#### Low Back Pain System Narrative

- 1.0 Initial contact is made with the physician or the nurse clinician. If indicated, the physician or nurse clinician refers the patient to PACOMED (Patient Learning Center) for health education for Low Back Pain.
- 2.0 Patient is contacted by mail. Telephonic follow-up is made to set up an appointment.
- 3.0 Health Educator will meet patient(s) as they enter PACOMED area.
- 4.0 Health Educator will familiarize the patient(s) with the Privacy Act Statement.
- 5.0 Fill out the Demographic Data Form.
- 6.0 Show video tape introducing Project: PACOMED

Software: Video tape cassette Hardware: Sony receiver/playback unit

- 7.0 Administer the pre-test for Low Back Pain Information.
- 8.0 Decision: Did the patient successfully complete the pre-test?

Yes: Proceed to Block 13.0

No: Continue to Block 9.0

- 9.0 Show the patient the behavioral objectives. The instruction is geared to meet the objectives. Inform the patient that these are the special areas he/she should be concerned about learning.
- 10.0 Show the patient(s) the video tape cassette entitled: Back Ache

Software: Video tape cassette

Hardware: Sony receiver/playback unit

- 11.0 Administer the post-test for Low Back Pain Information.
- 12.0 Decision: Did the patient successfully complete the post-test?

No: Return to Block 9.0

Yes: Continue to Block 13.0

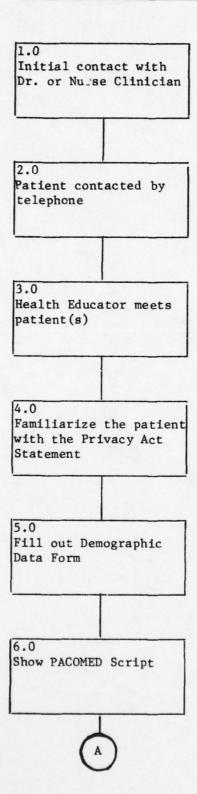
Low Back Pain System Narrative

- 13.0 Fill out the Patient Baseline Data Form.
  - 13.1 Record the results.
  - 13.2 Code for computer.
- 14.0 Fill out and send Physician Feedback Form.

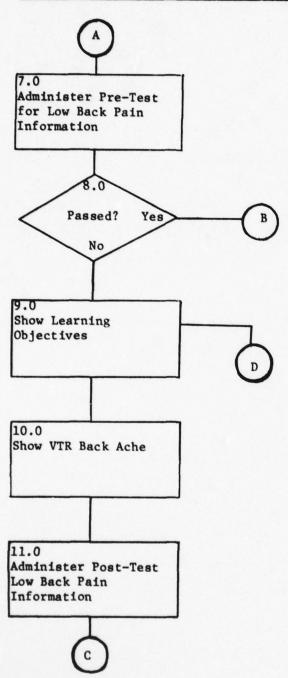
TERMINATE SYSTEM

NOTE: After the patient has successfully completed the learning track to the 80% competency level, each post-test score will be entered on the Patient Baseline Data and Follow-up Form.

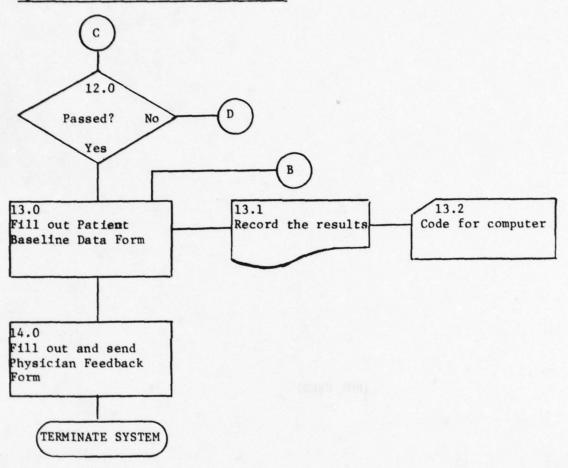
#### Systematic Flow Chart: Low Back Pain



#### Systematic Flow Chart: Low Back Pain



#### Systematic Flow Chart: Low Back Pain



#### APPENDIX 11

EVALUATION FUNCTIONS OF THE HEALTH EDUCATOR(S) AND ACCOMPANYING DATA COLLECTION SHEETS FOR THE EIGHT TOPIC AREAS

PRECEDING PAGE BLANK

#### EVALUATION FUNCTION

To Assist with Evaluation of the Systems Produced

- . Coordinates all activities (problems, etc.) with the Instructional Designer and Project Director.
- . Keeps records of all problem areas for final evaluation.
- . Ensures that all data collection (demographic and baseline data) is accurate and properly coded.
- . Screens lab reports as indicated.
- Categorizes and appropriately files all charts, and evaluating data pertaining to project (experimental groups plus/or control groups).
- . Tabulates participant background information.
- . Hand-tabulates all demographic data when indicated.
- . Checks key punched batch cards for errors.

### INCLOSURE 1

DATA COLLECTION SHEETS

Hypertension

(acare cerase)

Demographic and Baseline Data: Hypertension

ENCOUNTER #1	Card #1
Full Name Study ID:	Column 1
Address Card Type (#):	1 2
(City) (State) (Zip)	
Telephone Numbers: Home Work	_
1. Sponsor's last four digits of SSAN	3,4,5,6
2. Date: Month	7,8
Year	9,10
3. Patient's Status	11
4. Sponsor's Rank/Status	12
5. Sex	13
6. Age last birthday	14,15
7. Occupation	16
8. Marital status	17
9. Education completed	18
10. Time since diagnosed	19
11. Health care provider (1= M.D., 2= Nurse Clinician)	20
12. Has had prior instruction (1= yes, 2= no)	21
13. Time of prior instruction	
1= less then 3 mos.	22

Demographic and Baseline Data: Hypertension

E	ENC	OUNTER #1	Card #1
		Instructions provided by:	Column
		1= M.D. 2= Nurse Clinician	23
1	5.	Blood pressure (Actual Value) Syatolic	24,25,26
		Diastolic	27,28,29
1	6.	Weight (Actual Value in Pounds)	30,31,32
* 1	7.	Complies with the lab/ancillary tests 1= yes, 2= no	33
1	8.	Adherence to medical program:	
		a. Takes medication	
		1= yes 3= N/A	0.00
		2= no	34
		b. Knows drugs and action	
		1= yes 3= N/A	
		2= no	35
		Table To Tab	
		c. Adheres to low sodium diet	
		1= yes 3= N/A	
		2= no	36
		d. Number of cups of coffee per day (Actual Number)	37,38
		(Actual Number)	37,30
		e. Number of cigarettes per day	
		(Actual Number)	39,40
		f. Degree of tension experienced:	
		(1) Do you usually experience tension?	
		1= yes 2= none experienced	41
		2- none expertenced	
		(2) If yes, do you take medication for your tension?	
		l= yes	
		2= no	42

Demographic and Baseline Data: Hypertension

COUNTER #1		Card #1
		Column
g. Degree of	physical activity:	
(1) Waint	ains averaise program	serving seven survey - ea.
	ains exercise program s, 2= no	43
1- ye	s, 2- 110	'  <sup>43</sup>
(2) If ye	s, type of physical activity	15. Blood overdire chats
	dentary 4= vigorous	
2= 1i		
3= mo	derate	44
(0) 7		BULLEY TELESTON - TANKE OF
(3) Freque	ency of physical activity ily 3= weekly	a librarie de Santon Compaña
	ice weekly	1 45
	ice weekly	
	TYPE OF LEARNING MODE RECEIVED	Leskones concentà .50
	ENTER A #1 FOR EACH TYPE RECEIVED	
. Learning mode:	Conventional	46
	General Information (Hypertension)	47
	Sodium Restricted Diet	48
	A CONTRACTOR OF THE CONTRACTOR	
	General Information (Medications)	49
	Weight Control	1 50
	weight control	J
	Smoking	51
	tel the entitle	9-2005 34 lagsak JE
	Specific Instructions (Medications)	52
	Other	53

Demographic and Baseline Data: Hypertension

ENC	COUNTER #1	400				Card #2
				Study ID:	1_1_	Column 1
			Apte	Card Type		2
1.	Sponsor's last four	digits of SSAN:				3,4,5,6
	ENTER PRE AND POS FOR EACH TYPE OF					
2.	General Information	(Hypertension)	Total Possib	le  _	2   4	7,8,
			8	5%	2   1	9,10
			9	0%	2   2	11,12
			P	re  _		13,14
			Po	st [_	1	15,16
3.	Low Sodium Diet		Total Possib	1e	2   9	17,18
			8	5%	2   5	19,20
			9	0%	2   6	21,22
			P	re  _		23,24
			Po	st  _		25,26
4.	General Information	(Hypertension)	Total Possib	1e	1   9	27,28
			8	5%  _	1   6	29,30
			9	0%  _	1   7	31,32
			P	re  _		33,34
			Po	st [_		35,36

AHS Form 334a 1 Dec 75 Demographic and Baseline Data: Hypertension

ENC	COUNTER #1	SETCHIE BAAD BY LASH		Card #2
5.	Composite Score Information	for Pre Tests		Column
	Only:	Total Possible	7 2	37,38
		85%	1614	39,40
		90%	1615	41,42
	and water	Actual Score		43,44

3

O and Form 37 to

Process Evaluation: Hypertension

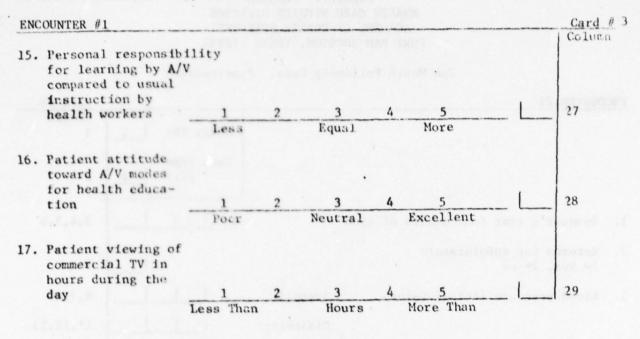
ENC	OUNTER #1		L. Valla E		Card #3
	. 61	2	Study ID:	1_	Column 1
			Card Type (#):	<u>_3</u>	2
1.	Sponsor's last four di	gits of Social Security No.		L	3,4,5,6
2.		arning experience, did you ptions about hypertension?		nini is	S. Conts
	(1= yes, 2= no)			2.00	7
		ons adequately clarified in e? (1= yes, 2= no, 3= somewha	nt)		8
	their value to you. (valuable, etc.) If you	ions <u>you received</u> in terms of 1= most valuable, 2 next most u feel that none were of valu		int in	electric transfer
	answer none.	General Information (Hypert	ension)	L	9
		Low Sodium Diet			10
		General Information (Medica	ations)		11
		Weight Control			12
		Smoking		اا	13
		Specific Instructions (Medi	lcations)	L	14
		Other			15
		None			16

AHS Form 334b 1 Dec 75

Process Evaluation: Hypertension

	opinion accordi corresp	-17 require . Rank eac ng to the s	ch it	em from on provided	e to	five		Card # 3 Column	
F	right.  XAMPLE: Viewing Time	e 1 Too Short	2	3 0K	4	5 Too Long	13	E	
	4957	-					'		
5.	Viewing Time	1 Too Short	2	3 0K	4	5 Too Long		Column 17	-
6.	Content Interest	1 Boring	2	3 OK	4	5 Fascinating	L	18	
7.	Questions on Topic	1 No Help	2	3 OK	4	5 Really Helped	Ц	19	
8.	Pace	Too Slow	2	3 OK	4	5 Too Fast	L	20	
9.	Content: Uniqueness	01d Stuff	2	3 OK	4	5 All New		21	C
10.	Content: Value	No Value	2	3 OK	4	5 Most Valuable	Ч	22	
11.	Learning Laboratory Technician's Style		2	3 OK	4	5 Excellent	Ц	23	
12.	Learning Center	. 1 Poor	2	3 0K	4	5 Excellent	Ч	24	
L3.	Preference for Instruction	1 A/V Mode	2	3 Neutral	4	5 Live Teacher		25	5
14.	Freedom to learn by A/V compared to usu instructions by health workers		2	3	4	5		26	
		Less Freedom		Equal		More Freedom	1		

Process Evaluation: Hypertension



18. If you have any comments about the learning experience that you would like to make, please tell us. We appreciate your help and cooperation so that we can improve your experience in the learning lab.

Physical Setting:

Health Educator:

Audio-Visual Equipment:

Patient Education Programs:

Paperwork:

Patient Learning Concept:

Other:

One Month Follow-Up Data: Hypertension

ENC	OUNTER #2	d craig	Card #4
	Study ID:	1	Column 1
	Card Type (#):	4	2
1.	Sponsor's last four digits of SSAN		3,4,5,6
2.	Returns for appointments 1= yes, 2= no	Daniel o	7
3.	Blood pressure (Actual Value) Systolic	-	8,9,10
	Diastolic		11,12,13
4.	Weight (Actual Value in Pounds Plus Gain or Loss) 1= gain, 2= loss	97444 A3(A2 A 5 Not 3	14,15,16,17
5.	Complies with the lab/ancillary tests 1= yes, 2= no	198	18
6.	Adherence to medical program:	estili	
	a. Takes medication 1= yes 3= N/A 2= no 4= don't know	Laverk	19
	b. Knows drugs and action 1= yes 3= N/A 2= no	gubă și	20
	c. Adheres to low sodium diet  1= yes 3= N/A  2= no		21
			21
	d. Number of cups of coffee per day (Actual Number Plus Increase or Decrease in Usage) 1= increase		
	2= decrease 3= no change		22,23,24

AHS Form 334c 1 Dec 75 One Month Follow-Up Data: Hypertension

NCOUNT	TER #2		Card #4
			Column
e.	Plus Increase or Decrease in Usage)		
	1= increase		EN STREET
	2= decrease	1 1	05 06 07
	3= no change		25,26,27
f.	Decrease in exogenous tension		
	1= yes		
	2= no		28
g.	Degree of physical activity:		al alxoense
	(1) Maintains exercise program		
	1= yes, 2= no	en autrici odd.p	29
	(2) If yes, type of physical activity		
	1= sedentary 4= vigorous		MARKET LOOP
	2= light 5= strenuous		
	3= moderate		30
	(3) Frequency of physical activity		(A) Make
	1= daily		sapa to alm
	2= twice weekly	1101	a dean
	3= weekly		31
		KISOL BILL PL	

Six Month Follow-Up Data: Hypertension

ENC	OUNTER #3	Card #5	
	15,65,25	Study ID: 1 Column 1	
		Card Type (#):   5 2	
1.	Sponsor's last four digits of SSAN	3,4,5,6	
2.	Returns for appointments 1= yes, 2= no	7	
3.	Blood pressure (Actual Value) Systo	lic 8,9,10	
	Diast	olic   11,12,13	
4.	Weight (Actual Value in Pounds Plus Gain or Loss) 1= gain, 2= loss	14,15,16,17	
5.	Complies with the lab/ancillary tests 1= yes, 2= no	18	
6.	Adherence to medical program:		
	a. Takes medication 1= yes 3= N/A 2= no 4= don't know	l 19	
	b. Knows drugs and action 1= yes 3= N/A 2= no	20	
	c. Adheres to low sodium diet  1= yes   3= N/A  2= no	21	

AHS Form 334d 1 Dec 75

ENCO	UNT	ER #3				Card #5
						Column
	d.		er of cups of coffee p			
			er Plus Increase or De	crease in Usage)		
			ncrease			
			ecrease		1 1	
		3= n	o change			22,23,24
	e.		er of cigarettes per d			
			er Plus Increase or De	ecrease in Usage)		
			ncrease			
			ecrease		1 1 1	
		3= n	o change			25,26,27
	f.		ease in exogenous tens	sion		
		1= y	es, 2= no			28
	g.	Degr	ee of physical activit	·v:		
	0.					
		(1)	Maintains exercise pr	rogram		
			1= yes			20
			2™ no		-	29
		(2)	If was tune of physic	last astiuitu		
		(2)	If yes, type of physical sedentary 4= vi	gorous		
				renuous		
			2= light 5= st 3= moderate	renuous		30
			3= moderate		************	1 30
		(3)	Frequency of physical	activity		
		(3)	l= daily	activity		
			2= twice weekly			
			3= weekly			31
			3 weekly		TOTAL PROPERTY.	
7. :	Six	mont	h retention scores (En	iter Total Correct)		
	a.	Gene	ral Information (Hyper	tension)		32,33
1	b.	Sodi	um Restricted Diet			34,35
	с.	Gene	ral Information (Medic	ations)		36,37
					1 1	
8.	Comp	posit	e score data:	Actual Score		38,39
9.	Rott	er's	I.E. Scale	Total Possible	2 3	40,41
				Actual Score		42,43
0.	Nels	son-D	enny Reading Score	Total Possible	1 0 0	44,45,46
				Actual Score		1 17 10 10

#### INCLOSURE 2

DATA COLLECTION SHEETS

44

Diabetes Mellitus

Demographic and Baseline Data: Diabetes

EN	COUNTER #1	A SUPERIAL PROPERTY OF THE PRO	Card #1
¥ Fu	11 Name	Study ID: 2	Column 1
Ad	dress	Card Type	
	(Street)	(#): 1	2
	(City) (State) (Zip)	168	
Te	lephone Numbers: Home Work		
1.	Sponsor's last four digits of SSAN		3,4,5,6
2.	Date: Month	1 10 W 10 10 10 10 10 10 10 10 10 10 10 10 10	7,8,
	Year		9,10
3.	Patient's status	ALLEY TO FREE TOWN	11
4.	Sponsor's Rank/Status	Strail agnodary	12
5.	Sex		13
6.	Age last birthday		14,15
7.	Occupation		16
8.	Marital status	would at not I	17
9.	Education completed	- mol ros bas Land	18
10.	Time since diagnosed	AVE C	19
11.	Health Care Provider(1 = M.D., 2= Nurse Clinician	a)	20
12.	Has had prior instruction (1= yes, 2= no)		21
13.	Time of prior instruction  1= less then 3 mos.	ivilas iestavoja o Alvet (tera) romeć, ies	f. Type 1- 40 2- 11
	3= 7 to 12 mos.		22

HS Form 339 Dec 75 Demographic and Baseline Data: Diabetes

ENCC	OUNTER #1	STREET, BUILDING TO VESTAL	Card #1	
		ISC SAME, ENLIGHE MAR.	Column	
14.	Instructions provided by	<b>7</b> :		
	1= M.D.		thus sound	
	2= Nurse Clinician		23	
15.	Results of Urine Tests:	Sugar Test		
	(Actual Value)	0= Neg		
	(	1= 1+		
		2= 2+		
		3= 3+		
		4= 4+	24	
		Ketone Test	Te 100	
		0= Neg		
		l= Trace	mand labelled one	
		2= Moderate		
	6.4.4.6	3= Large	25	
	n			
16.	Results of Blood Sugar T	est: Fasting	1 1 1 26 27 2	
	(Actual Value)		26,27,2	8
17.	Adherence to medical pro	oram:		
	numerones to medical pro	,814	este e a seu c	
	a. Follows exchange lis	at and instructions		
	1= yes		SERVICE SERVICES	
	2= no		29	
	b. Achieves and maintai		1 1 1 1 22 22 2	
	(Actual weight in po	ounds)	30,31,3	2
	c. Takes medication			
	1= yes 3= N/A			
	2= no 4= Don't k	mow	33	
	d. Knows drugs and acti	on	Serger description	
	1= yes			
	2= no 3= N/A		34	
	a Madatadan ayanadan m			
	e. Maintains exercise p	rogram	the second second second second second	
	1= yes		35	
	2= no		33	
	f. Type of physical act	ivity:	make several to the se	
		vigorous	The second second	
		strenuous		
	3= moderate		36	

Demographic and Baseline Data: Diabetes

ENCOUNTER #1	ACCESSES ACCESSES NO SAMPLES		Card #1
g. Frequency 1= Daily 2= Twice W 3= Weekly	of physical activity:		Column
inwle3			
h. Maintains 1= yes	adequate schedule of sleep and rest.		
2= no		i	38
	proper foot care.		
1= yes 2= no			39
	TYPE OF LEARNING MODE RECEIVED ENTER A #1 FOR EACH TYPE RECEIVED	COMA RE	
8. Learning mode:	Conventional	1	40
	General Information (Diabetes)	damola	41
	Diabetic Diet		42
	Insulin Treatment	1	43
	Other		44

Demographic and Baseline Data: Diabetes

ENC	COUNTER #1			Card #2	
			Study ID: 2  Card Type (#): 2	Column 1	
1.	Sponsor's last four digits of	of SSAN:		3,4,5,6	1
	TEST SCORES ENTER PRE AND POST SCORES FOR EACH TYPE OF LEARNING	(NUMBER CORRECT)	19 A 80000		
2.	Diabetes Information	Total Possible	7 8	7,8	
		80%	6 3	9,10	
		85%	6 6	11,12	
		Pre		13,14	
		Post		15,16	
3.	Diabetic Diet Information	Total Possible	6 7	17,18	
		80%	5 4	19,20	
		85%	5 7	21,22	
		Pre		23,24	
		Post		25,26	
4.	Insulin Treatment	Total Possible	3 2	27,28	
		80%	1_2   7	29,30	3
		85%	2 8	31,32	
		Pre	<u></u>	33,34	
		Post		35,36	

AHS Form 339a 1 Dec 75 Demographic and Baseline Data: Diabetes

ENC	COUNTER #1		Card #2
5.	Composite Only:	Score Information for Pre Tests	Column
	Ch lead	Total Possible 1 7 7	_ 37,38,39
		80%   1   4   5	40,41,42
		85% 1 5 0	43,44,45
		Actual	46,47,48

Process Evaluation: Diabetes

ENC	OUNTER #1	I bloreous fazor		Card #3	
	56, 10, 00   1   2   3	1 308	Study ID: 2	Column 1	
		Language Company	Card Type (#):   3	2	
1.	Sponsor's last four dig	gits of Social Security No	,	3,4,5,6	
2.		arning experience, did you otions about diabetes? (1=		7	
3.	Were these misconception the learning experience	8			
4.	their value to you. (I valuable, etc.) If you	ons you received in terms l= most valuable, 2 next m n feel that none were of v	nost		
	answer none.	General Information (Dia	abetes)	9	-
		Diabetic Diet	L	10	
		Insulin Treatment	<u> </u>	11	
		Other	<u> </u>	12	
		None		13	

Turn to the next page

AHS Form 339b 1 Dec 75 Process Evaluation: Diabetes

INSTRUCTIONS: Items 5-17 require a response reflecting your opinion. Rank each item from one to five according to the scale provided and place the corresponding rank in the coding column to the right.								Card #
E	XAMPLE: Viewing Time	e 1 Too Short	2	3 0K	4	5 Too Long	13	E
	,			-		an like	17 I west	Column
5.	Viewing Time	Too Short	2	OK	4	Too Long		14
6.	Content Interest	Boring	2	3 OK	4	5 Fascinating		15
7.	Questions on Topic	No Help	2	3 OK	4	5 Really Helped	<u> </u>	16
8.	Pace	Toe Slow	2	3 0K	4_	5 Too Fast	L	17
9.	Content: Uniqueness	s 1 Old Stuff	2	3 OK	4	5 All New	_ \	18
0.	Content: Value	1 No Value	2	3 OK	4	5 Most Valuable		19
1.	Learning Laboratory	,						
	Technician's Style	Poor	2	<u>3</u> ОК	4	5 Excellent		20
2.	Learning Center	Poor	2	3 0K	4	5 Excellent		21
3.	Preference for Instruction	1	2	3	4	5	la exerci	22
		A/V Mode		Neutral	130	Live Teacher	[annta	
4.	Freedom to learn by A/V compared to usu instructions by							
	health workers	11	2	3	4	5		23
		Less Freedom		Equal		More Freedom		

Process Evaluation: Diabetes

ENC	OUNTER #1							Card #3
15.	Personal responsib for learning by A/ compared to usual instruction by		tion on on other	ige of a dec Limit Hoo equatione a ada nt an		T T. H. SSBOT BO JOHN TRADA BO JOHN TRADA GO JOHN TRADA		Column
	health workers	Less	2	Equal	4	More	_	. 24
16.	Patient attitude toward A/V modes for health educa-							
	tion	Poor	2	3 Neutral	4	5 Excellent	_	25
17.	Patient viewing of commercial TV in hours during the					PATE :	o Colona	60 . 6
	day	Less Than	2	3 Hours	4	More Than	- '	26

18. If you have any comments about the learning experience that you would like to make, please tell us. We appreciate your help and cooperation so that we can improve your experience in the learning lab.

Physical Setting:

Health Educator:

Audio-Visual Equipment:

Patient Education Programs:

Paperwork:

Patient Learning Concept:

Other:

Three Month Follow-Up Data: Diabetes

ENG	COUNTER #2			Card # 4
	er1		Study ID:  _	2 Column
			Card Type (#):	4 2
				GR 2/3
1.	Sponsor's last four	digits of Social Security	No.	3,4,5,6
2.	Returns for Appoint	ments.		almież ni
	l= yes			
	2= no			7
				Contemporal B
3.	Results of Urine Tes			vil all al
	(Actual value)	0= Neg		The Indian
		1= 1+		41 Mari 45
		2= 2+		
		3= 3+	odubodaje sastrodni	8
		4= 4+	_	
		W		20 00
		Ketone Test		
		0= Neg		and contains a little of the contains and the contains a little of the
		l= Trace 2= Moderate		Low Miles
				9
		3≠ Large	-	- '
4.	Results of Blood Sug	gar Test: Fasting		
	(Actual value)			10,11,12
5.	Adherence to medica	l program:		
	a. Follows exchange	e list and instructions		
	1= yes			
	2= no			13
,				
	b. Achieves and ma	intains ideal weight:		
	(Actual weight	in pounds + gain or loss)		
	1= gain			
	2= loss			
	3≈ no weight pro	oblem		14,15,16,17

AHS Form 339c 1 Dec 75 Three Month Follow-Up Data: Diabetes

OUNT	ER #2			Card #4	4
		TO MANAGEMENT OF THE PARTY OF T		Column	
c.	Takes medication				
	1= yes 3= N/A				
	2= no 4= Don't know			18	
d.	Knows drugs and action				
	1= yes 3= N/A				
	2= no			19	
e.	Maintains exercise program				
	1= yes				
	2= no			20	
f.	Type of physical activity:		1 788		
	1= Sedentary 4= Vigorous				
	2= Light 5= Strenuous		9714		
	3= Moderate			21	
g	Frequency of physical activity:				
	1= Daily		STILL IN		
	2= Twice Weekly		1,000		
	3= Weekly			22	
h	Maintains adequate schedule of sleep and	rest			
	1= yes				4
	2= no			23	
1	Maintains proper foot care				
	1= yes				
	2= no	Talkini a k		24	
		and the same of			

Six Month Follow-Up Data: Diabetes

Study ID:   2   1	ENC	COUNTER #3		Card #5
1. Sponsor's last four digits of Social Security No. 3,4,5,6  2. Returns for Appointments 1= yes 2= no 7  3. Results of Urine Tests: Sugar Test 0= Neg 1= 1+ 2= 2+ 3= 3+ 4= 4+ 8  Ketone Test 0= Neg 1= Trace 2= Moderate 3= Large 9  4. Results of Blood Sugar Test: Fasting (Actual Value) 10,11,12  5. Adherence to medical program: a. Follows exchange list and instructions 1= yes 2= no b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem 14,15,16, c. Takes Medication 1= yes 3= N/A		20	Study ID: 2	Column 1
1. Sponsor's last four digits of Social Security No. 3,4,5,6  2. Returns for Appointments 1= yes 2= no 7  3. Results of Urine Tests: Sugar Test 0= Neg 1= 1+ 2= 2+ 3= 3+ 4= 4+ 8  Ketone Test 0= Neg 1= Trace 2= Moderate 3= Large 9  4. Results of Blood Sugar Test: Fasting (Actual Value) 10,11,12  5. Adherence to medical program: a. Follows exchange list and instructions 1= yes 2= no 13  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem 14,15,16, c. Takes Medication 1= yes 3= N/A			Card Type	
2. Returns for Appointments  1= yes 2= no  3. Results of Urine Tests: Sugar Test 0= Neg 1= 1+ 2= 2+ 3= 3+ 4= 4+   Ketone Test 0= Neg 1= Trace 2= Moderate 3= Large  4. Results of Blood Sugar Test: Fasting (Actual Value)  5. Adherence to medical program: a. Follows exchange list and instructions 1= yes 2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem  c. Takes Medication 1= yes 3= N/A			30000 304 40	MATERIA.
2. Returns for Appointments  1 = yes 2 = no  3. Results of Urine Tests: Sugar Test 0 = Neg 1 = 1 + 2 = 2 + 3 = 3 + 4 = 4 +    Ketone Test 0 = Neg 1 = Trace 2 = Moderate 3 = Large  4. Results of Blood Sugar Test: Fasting (Actual Value)  5. Adherence to medical program:  a. Follows exchange list and instructions 1 = yes 2 = no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1 = gain 2 = loss 3 = no weight problem  c. Takes Medication 1 = yes 3 = N/A	1.	Sponsor's last four digits of Social	Security No.	3,4,5,6
1= yes 2= no  3. Results of Urine Tests: Sugar Test 0= Neg 1= 1+ 2= 2+ 3= 3+ 4= 4+	2.			an will a
3. Results of Urine Tests: Sugar Test  0= Neg 1= 1+ 2= 2+ 3= 3+ 4= 4+   Ketone Test 0= Neg 1= Trace 2= Moderate 3= Large  4. Results of Blood Sugar Test: Fasting (Actual Value)  9  4. Results of Blood Sugar Test: Fasting (Actual Value)  10,11,12  5. Adherence to medical program:  a. Follows exchange list and instructions 1= yes 2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem  c. Takes Medication 1= yes 3= N/A				
0= Neg 1= 1+ 2= 2+ 3= 3+ 4= 4+  Ketone Test 0= Neg 1= Trace 2= Moderate 3= Large  4. Results of Blood Sugar Test: Fasting (Actual Value)  5. Adherence to medical program:  a. Follows exchange list and instructions 1= yes 2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem  c. Takes Medication 1= yes 3= N/A		2= no	manie la alubativa ammont	1 7
0= Neg 1= 1+ 2= 2+ 3= 3+ 4= 4+  Ketone Test 0= Neg 1= Trace 2= Moderate 3= Large  4. Results of Blood Sugar Test: Fasting (Actual Value)  5. Adherence to medical program:  a. Follows exchange list and instructions 1= yes 2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem  c. Takes Medication 1= yes 3= N/A				100 May 100 100 100 100 100 100 100 100 100 10
1= 1+ 2= 2+ 3= 3+ 4= 4+   Ketone Test 0= Neg 1= Trace 2= Moderate 3= Large  4. Results of Blood Sugar Test: Fasting (Actual Value)  5. Adherence to medical program:  a. Follows exchange list and instructions 1= yes 2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem  c. Takes Medication 1= yes 3= N/A	3.			
1= 1+ 2= 2+ 3= 3+ 4= 4+  Ketone Test 0= Neg 1= Trace 2= Moderate 3= Large  4. Results of Blood Sugar Test: Fasting (Actual Value)  5. Adherence to medical program:  a. Follows exchange list and instructions 1= yes 2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem  c. Takes Medication 1= yes 3= N/A				an Full I
2= 2+ 3= 3+ 4= 4+  Ketone Test 0= Neg 1= Trace 2= Moderate 3= Large  4. Results of Blood Sugar Test: Fasting (Actual Value)  5. Adherence to medical program:  a. Follows exchange list and instructions 1= yes 2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem  c. Takes Medication 1= yes 3= N/A				
Ketone Test  0= Neg  1= Trace  2= Moderate  3= Large  4. Results of Blood Sugar Test: Fasting (Actual Value)  5. Adherence to medical program:  a. Follows exchange list and instructions  1= yes  2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss)  1= gain  2= loss  3= no weight problem  c. Takes Medication  1= yes 3= N/A		2= 2+		
Ketone Test  0= Neg 1= Trace 2= Moderate 3= Large  4. Results of Blood Sugar Test: Fasting (Actual Value)  5. Adherence to medical program:  a. Follows exchange list and instructions 1= yes 2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem  c. Takes Medication 1= yes 3= N/A		3= 3+	Of Two or warned anything matters and	25 4 4 5 4 5 5
Ketone Test  0= Neg  1= Trace 2= Moderate 3= Large  4. Results of Blood Sugar Test: Fasting (Actual Value)  5. Adherence to medical program:  a. Follows exchange list and instructions  1= yes 2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss)  1= gain 2= loss 3= no weight problem  14,15,16,  c. Takes Medication 1= yes 3= N/A	-)	4= 4+		8
0= Neg 1= Trace 2= Moderate 3= Large  4. Results of Blood Sugar Test: Fasting (Actual Value)  5. Adherence to medical program:  a. Follows exchange list and instructions 1= yes 2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem  c. Takes Medication 1= yes 3= N/A				100
1= Trace 2= Moderate 3= Large  4. Results of Blood Sugar Test: Fasting (Actual Value)  5. Adherence to medical program:  a. Follows exchange list and instructions 1= yes 2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem  c. Takes Medication 1= yes 3= N/A				
1= Trace 2= Moderate 3= Large  4. Results of Blood Sugar Test: Fasting (Actual Value)  5. Adherence to medical program:  a. Follows exchange list and instructions 1= yes 2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem  c. Takes Medication 1= yes 3= N/A		0= Neg		
4. Results of Blood Sugar Test: Fasting (Actual Value)  5. Adherence to medical program:  a. Follows exchange list and instructions 1= yes 2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem  c. Takes Medication 1= yes 3= N/A		1= Trace		
4. Results of Blood Sugar Test: Fasting (Actual Value)  5. Adherence to medical program:  a. Follows exchange list and instructions 1= yes 2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem  c. Takes Medication 1= yes 3= N/A		2= Moderate	1900 1000 1	
(Actual Value)  5. Adherence to medical program:  a. Follows exchange list and instructions  1= yes  2= no  13  b. Achieves and maintains ideal weight  (Actual weight in pounds + gain or loss)  1= gain  2= loss  3= no weight problem  14,15,16,  c. Takes Medication  1= yes   3= N/A		3= Large		9
(Actual Value)  5. Adherence to medical program:  a. Follows exchange list and instructions  1= yes  2= no  13  b. Achieves and maintains ideal weight  (Actual weight in pounds + gain or loss)  1= gain  2= loss  3= no weight problem  14,15,16,  c. Takes Medication  1= yes   3= N/A				
5. Adherence to medical program:  a. Follows exchange list and instructions  1= yes  2= no  13  b. Achieves and maintains ideal weight  (Actual weight in pounds + gain or loss)  1= gain  2= loss  3= no weight problem  14,15,16,  c. Takes Medication  1= yes  3= N/A	4.	Results of Blood Sugar Test: Fastin	g	The state of the s
5. Adherence to medical program:  a. Follows exchange list and instructions  1= yes 2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss)  1= gain 2= loss 3= no weight problem  c. Takes Medication 1= yes 3= N/A		(Antunt Value)		10,11,12
a. Follows exchange list and instructions  1= yes 2= no    13   b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem    14,15,16,   14,15,16,   15,16,   16,16,16,   17,16,16,16,16,16,16,16,16,16,16,16,16,16,				3 10 230 2 3 0 70
1= yes 2= no  b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss) 1= gain 2= loss 3= no weight problem  c. Takes Medication 1= yes 3= N/A	5.	Adherence to medical program:		
b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss)  1= gain 2= loss 3= no weight problem  14,15,16,  c. Takes Medication 1= yes 3= N/A			ctions	notification (1958)
b. Achieves and maintains ideal weight (Actual weight in pounds + gain or loss)  1= gain 2= loss 3= no weight problem  14,15,16,  c. Takes Medication 1= yes 3= N/A				1.0
(Actual weight in pounds + gain or loss)  1= gain 2= loss 3= no weight problem  14,15,16,  c. Takes Medication 1= yes 3= N/A		2= no	R Indian	13
(Actual weight in pounds + gain or loss)  1= gain 2= loss 3= no weight problem  14,15,16,  c. Takes Medication 1= yes 3= N/A				
1= gain 2= loss 3= no weight problem  14,15,16,  c. Takes Medication 1= yes 3= N/A				Gefalen Se
2= loss 3= no weight problem  14,15,16,  c. Takes Medication 1= yes 3= N/A			or loss)	
3= no weight problem  14,15,16,  c. Takes Medication 1= yes 3= N/A				
c. Takes Medication 1= yes 3= N/A			1 1 1 1	14 15 16 1
1= yes 3= N/A		3= no weight problem		14,15,16,1
1= yes 3= N/A		c. Takes Medication		
		2= no 4= Don't know	598	18

Six Month Follow-Up Data: Diabetes

ENC	OUNTER #3	Casaldhas axao boxash		Card #5	0
	d. Knows drugs and action			Column	
	1= yes 3= N/A				
	2= no		L_	19	
	e. Maintains exercise program				
	1= yes, 2= no			20	,
	f. Type of physical activity:				
	l= sedentary 4= vigorou				
	2= light 5= strenuc	ous	1	01	
	3= moderate			21	100
	g. Frequency of physical activ	vity:	root re		
	l= daily 3= week!	ly	1	00	
	2= twice weekly		-	22	
	h. Maintains adequate schedule	e of sleep and rest			
	1= yes, 2= no		11	23	
	i. Maintains proper foot care				
	1= yes, 2= no			24	
6.	Six Month Retention Scores (Ente	er total correct)			0
	a. Diabetes Information	L		25,26	
	b. Diabetic Diet Informat:	ion L		27,28	
	c. Insulin Treatment	Marriage = T		29,30	
7.	Composite Score Data:	Actual Score		31,32,33	
8.	Rotter's I.E. Scale	Total Possible	2   3	34,35	
		Actual Score	sul ben	36,37	
9.	Nelson-Denny Reading Score	Total Possible	0 0	38,39,40	
		Actual Score		41,42,43	1
10.	Opinion Scale (Diabetes)	Total Possible	2   6	44,45	
		Actual Score		46,47	

#### INCLOSURE 3

DATA COLLECTION SHEETS

Weight Control

ENC	OUNTER #1				Card #1
	1 Name:		Study ID:	13	Column 1
Add	ress (Street)	PT084300	Card Type (#):	1_1_	2
	(City) (State)	(Zip)			
Tel	ephone Numbers: Home	Work			
1.	Sponsor's last four digits of SSN		1		3,4,5,6
2.	Date: Month		_		7,8
	Year		_		9,10
3.	Patient's status				11
4.	Sponfor's Rank/Status			1	12
5.	Sex			_	13
6.	Age last birthday		1_		14,15
7.	Occupation			I	16
8.	Marital status				17
9.	Education completed				18
10.	Health Care Provider				
	1= M.D. 2= Nurse Clinician				19
11.	Has had prior instruction 1= yes, 2= no			10	20
12.	Time of prior instruction 1= less then 3 mos. 2= 4 to 6 mos. 3= 7 to 12 mos. 4= 1 to 2 yrs.				2
	5= more then 2 yrs.			-	21

ENCO	UNTER #1			Card #1
		170101300	La Tol	Column
3.	Instructions provided by:		7	
	1= M.D.			
	2= Nurse Clinician		.	
	3= Dietitian			22
			My de 14	20
١.	Time since diagnosed as obese			23
5.	N	Unahand = 1	LEVEL ST	
	How many members of your family are obese:	Husband = 1 Wife = 2		
		Both $= 3$		24
		both - 5	-	
		Children		
		(Actual #)	1	25,26
		(		A TO A TO SHOW THE
		Parents		
		Maternal = 1		
		Paternal = 2		
		Both = 3	-	27
	TYPE OF LEARNING MODE RECEI ENTER A #1 FOR EACH TYPE RE			
•	Learning Mode:			
	Introduction to Anatomy and Physiology of t	he Digestive		
	Tract and the Importance of Good Eating Hab		1	28
			Tel no	mil 5 162 1
	Introduction and Concepts About Obesity			29
	Caloric Expenditure and Introduction to Phy	sical		
	Activity	orcur.	1 1	30
			-	30
	Concepts Pertaining to the Importance of Ph	ysical		
	Exercise.			31
			Pyrollind	Lundy C
	How to Use the Food Exchange List		-	32
			1	
	1,200 Calorie Diet			33
	1 500 Calanda Dian		1	24
	1,500 Calorie Diet			34
	Other		1 1	35
				33
7.	Actual weight in pounds	ACCURACY SECTION IN		36,37,38
	The court we again an pounds		-	20,31,30
3.	Maintains Exercise Program			
	1= yes			
	2= no			39
			-	

ENCOUNT	TER #1				Card #1
					Column
	me of physical a				What server with
		- vigorous			No.
				1	40
3-	moderate				40
20. Fr	equency of physi	cal activity			
	daily	3= weekly			State on T
	twice weekly	4- N/A			41
21. Ur	deretande limita	tions of own calors	le intaka		Section 1
700	yes 3= N/		ic Incare		
	no J- N			1	42
	, no			<u> </u>	7.
		of Weight Watchers	etc.		
	yes				
2=	no				
3-	N/A			1	43
23. Ty	me of snacks con	sumed (Refer to exc	change list)		
	Carbohydrate	4= Fruit	mange tracy		
	Protein				
		5= Milk		1 1	44.45
3-	Fat	6= Bread			1 44,45
4. Nu	mber of snack ti	mes per day			
	1 to 5				
2=	5 to 10				
	11 to 15				
	more then 15			1	46
	more then 15			Acres Care	ket in about all
5. Ad	herence to Medic	al Program:			
a.	Knows drugs an	d action			
	1= yes				
	2= no ,			al guinter	47
ь.		on			
	1= yes			1	1
	2= no				48
		TEST SCORES	3		
		E AND POST SCORES TYPE OF LEARNING	(NUMBER CORRECT)		
6. Ge	neral Information	n Weight Control	Total Possible	12 19	49.50
			Pre	11	51,52
				1	is an interview
			Post Post		53,54

ENCC	DUNTER #1	1250 C		Card #1
27.	Physical Activity/Food	Exchange Lists Total Possible	1 1 5	Column 55,56
		Pre		57,58
		Post	1	59,50
28.	Composite Score Data:	Possible	1414	61,62
		Pre	1	63,64
		Post	11 2/2 30	65,56
29.	O/A Compulsive Eating So l= positive	cale	ai ebia 3o manas a ku	
	2= negative			67

Process Evaluation: Weight Control

ENC	OUNTER #1			Card #2
	66,98	Study ID:	1_3	Column 1
	Sector of the armount	Card Type (#):		2
1.	Sponsor's last four digits of Social Security No		1_	3,4,5,6
2.	As a result of this learning experience, did you think you had misconceptions about weight contro obesity?  1= yes		363 97	
	2= no		_	7
3.	Were these misconceptions adequately clarified in the learning experience? 1= yes	n		
	2= no			8
4.	Rank the learning sections you received in terms their value to you. (1= most valuable, 2= next most valuable, etc.)	of		
	Introduction to Anatomy and Physiology of the Di Tract and the Importance of Good Eating Habits	gestive		9
	Introduction and Concepts About Obesity			10
	Caloric Expenditure and Introduction to Physical	Activity		11
	Concepts Pertaining to the Importance of Physical Exercise	1		12
	How to Use the Food Exchange List			13
	1,200 Calorie Diet			14
	1,500 Calorie Diet		1	15
	Other		1	16

Process Evaluation: Weight Control

	opinion accordi:	. Rank each	ch it	esponse re em from on provided the coding	e to	five place the	intos cosi heroga incos e anii	Card #
F	XAMPLE: Viewing Time	e 1 Too Short	2	3 0K	4	5 Too Long	13	Е
	85 June 1		H. Du		100			Column
5.	Viewing Time	Too Short	2	OK	4	Too Long	_	17
6.	Content Interest	1	2	3	4	5	1	18
0.	content Interest	Boring	-	OK	1	Fascinating		ab.
7.	Questions on Topic	No Help	2	3 OK	4	5 Really Helped	_ L	19
8.	Pace	1. Too Slow	2	3 OK	4	5 Too Fast	L	20
9.	Content: Uniquenes		2	3	4	5	1	21
,	Content: Uniqueness	Old Stuff		OK OK		All New	- L	
0.	Content: Value	1 No Value	2	3 0K	4	5 Most Valuable	-	22
1.	Learning Laboratory	,						
	Technician's Style		2	3 OK	4	5 Excellent		23
2.	Learning Center	1	2	3	4	5		24
		Poor		OK		Excellent		
3.	Preference for	,	2	3	4	5	1	25
	Instruction	A/V Mode		Neutral	-	Live Teacher	- !	
4.	Freedom to learn by A/V compared to usu instructions by						1.8913	9
	health workers	1	2	3	4	55		26
		Less Freedom		Equal		More Freedom		

Process Evaluation: Weight Control

ENC	OUNTER #1							Card #2
15.	Personal responsib for learning by A/ compared to usual instruction by	ility V				The gunt :		Column
	health workers	Less	2	Equa1	4	5 More		. 27
	- Andrews							
6.	Patient attitude toward A/V modes for health educa-	50/2						534
	tion	1	2	3	4			28
		Poor		Neutral		Excellent		100
7.	Patient viewing of commercial TV in							
	hours during the						,	1
	day	1	2	3	4	5		29
		Less Than		Hours		More Than		

18. If you have any comments about the learning experience that you would like to make, please tell us. We appreciate your help and cooperation so that we can improve your experience in the learning lab.

Physical Setting:

Health Educator:

Audio-Visual Equipment:

Patient Education Programs:

Paperwak:

Patient Learning Concept:

Other:

Three Month Follow-Up Data: Weight Control

ENC	OUNTER #2			Card #3
		Study ID:	13	Column 1
		study ID.	1_3_	a bitto could be
		Card Type	1000	
	90	(#):	3	2
		1		
1.	Sponsor's last four digits of Social Security No			3,4,5,6
2.	Returns for appointments			
	1= yes, 2= no			7
3.	Achieves and maintains ideal weight			
	(Actual weight in pounds + gain or loss)			
	1= gain 2= loss	111	1	8,9,10,1
	2= 1088			0,5,10,1
4.	Maintains exercise program			
	1= yes, 2= no			12
5.	Type of physical activity:			
	I= sedentary 4= vigorous			
	2= light 5≈ strenuous		1	
	3= moderate			13
6.	Frequency of physical activity:			
	l= daily 3= weekly		1	
	2= twice weekly 4= N/A			14
7.	Understands limitations of own caloric intake		. 1	
	1= yes, 2= no			15
8.	Regular attendance of Weight Watchers etc.			
	1= yes, 2= no, 3= N/A			16
9.	Type of snacks consumed (Refer to exchange list)			
	1= carbohydrate 4= fruit			
	2= protein 5= milk	1	1	
	3= fat 6= bread			17,18

Three Month Follow-Up Data: Weight Control

ENCO	UNTER #2		Card #3	U
10.	Number of Snack Times per day 1= 1 to 5			
	2= 6 to 10 3= 11 to 15			
	4= more then 15		19	
11.	Adherence to Médical Program:			
	a. Knows drugs and action 1= yes, 2= no		20	
	b. Takes medication 1= yes, 2= no	7 500	21	*

Six Month Follow-Up Data: Weight Control

ENC	COUNTER #3	edi etna =2 01	Card #4
	OB	Study ID: 3	Column 1
		Card Type (#): 4	2
1.	Sponsor's last four digits of Social Security No	0.1.1.1	3,4,5,6
2.	Returns for appointments	esocial antiquests a	
	1= yes, 2= no		7
3.	Achieves and maintains ideal weight (Actual weight in pounds + gain or loss)	nacing terms as the	
	1= gain 2= loss		8,9,10,11
4.	Maintains exercise program	led making substi	
	1= yes, 2= no	3.91	12
· .	Type of physical activity		
	1= sedentary 4= vigorous 2= light 5= strenuous	M1800 11.1	
	3= moderate		13
6.	1= daily	oncy Pasting Scale	
	2= twice weekly 3= weekly		
	4= N/A		14
7.	Understands limitations of own caloric intake		
	1= yes, 2= no		15
3.	Regular attendance of weight watchers etc. 1= yes		
	2= no 3= N/A		16
	Type of stacks consumed (refer to exchange list) 1= carbohydrate		
	2= protein 5= milk 3= fat 6= bread		17,18

Six Month Follow-Up Data: Weight Control

ENCOUNTER #3		Card #4	
ACSAY - ECORE THOUSERS THAT SHARE	- 1	Column	
10. Number of snack times per day 1= 1 to 5 3= 11 to 15			
2= 6 to 10   4= more then 15	1	19	
11. Adherence to medical program			,
a. Knows drugs and action l= yes, 2= no	_	20	
b. Takes medication 1= yes, 2= no		21	
12. Six month retention scores	101 4870		
a. General Information Weight Control		22,23	
b. Physical Activity/Food Exchange List		24,25	
c. Composite Score Data		26,27	
13. O/A Compulsive Eating Scale 1= Positive			
2= Negative	i	28	C
14. Rotter's I.E. Scale Possible 12	1 3	29,30	
Actual	1	31,32	
15. Nelson-Denny Reading Scale Possible 1 0	010	33,34,35	
Actual		36,37,38	

### INCLOSURE 4

DATA COLLECTION SHEETS

Breast Self-Examination

81

Demographic, Baseline Data and Test Scores: Breast Self-Examination

ENC	COUNTER #1		Card #1	
Ful	1 Name	Study ID: 4	Column 1	
Add	(Street)	Card Type (#):   1	2	
	(City) (State) (Zip)			
Tel	ephone Numbers: Home Work			
1.	Sponsor's last four digits of SSAN		3,4,5,6	
2.	Date: Month		7,8	
	Year	<u> </u>	9,10	
3.	Patient Status		11	
4.	Sponsor's Rank/Status	<u> </u>	12	C
5.	Sex	<u> </u>	13	
6.	Age last birthday	<u> </u>	14,15	
7.	Occupation	<u> </u>	16	
8.	Marital status		17	
9.	Education completed		18	
10.				11
	1= M.D. 2∓ Nurse Clinician	<u> </u>	19	
11.	Has had prior instruction 1= yes, 2= no		20	7
12.	Time of prior instruction 1= less then 3 mos. 2= 4 to 6 mos. 3= 7 to 12 mos.			
	4= 1 to 2 yrs. 5= more then 2 yrs.		21	

### Demographic, Baseline Data and Test Scores: Breast Self-Examination

ENCC	DUNTER #1			Card #1
13.	Instructions provided by: 1= M.D.		s breast blogsiss	Column
	2= Nurse Clinician		rayonal 32 . 12-23	22
14.	Number of children:		lenken Melignane	- T
	1= 1		AV	
	3= 3		TYPE OF SEATOR	23
15.	Age when first child was born	(Actual age)	OF IN A SET NO.	2425
16.	Age when last child was born (A	Actual age)	± p Salii	26,27
17.	Did you breast feed your childs	en?	iony of the Breakt	
	1= yes, 2= no		notasminumi ist <u>era</u>	28
	a. How many children: 1= 1 4= 4		I Breast bemonstrat	
	2= 2 5= 5 or more 3= 3		Broopts Menchly	29
	b. How long for each child:		not taches. To see	
	1= 2 wks. 4= 3 mos.		916	
	2= 1 mo. 5= 4 mos.		atelo	no sol = S
	3= 2 mos. 6= 5 mos. or 1	longer	gmuJ lo r	30
18.	,		0.7 = 5	
	1= yes, 2= no	Colon		31
		Breast	10.10	32
		Uterus	ad real I	33
		Cervix	TRET TREE AND POST S	34
19.	What age were you at marriage (	(Actual age)	OR TAUL PIE OF LEA	35,36
20 .	Date of last Breast Self-Examin	ation:	elal moldanismad-li	
	a. Month (01 through 12)		1	37 <b>,3</b> 8
	b. Year			
	76= 1976 75= 1975		ast Desonatration	
	1= Over 1 yr ago		ballet "S .	
	2= 2 or more years ago			39,40

#### Demographic, Baseline Data and Test Scores: Breast Self-Examination

ENCO	UNTER #1			Card #1
				Column
1 .	Previous breast biopsies 1= yes, 2= no		Street!	41
	1- 968, 2- 110			The Real Property of
	a. Diagnosis, if known:		wintle	
	1= Benign			
	2= Malignant			
	3= N/A		-	42
	TYPE OF LEARNING MODE RECEIVED ENTER A #1 FOR EACH TYPE RECE		i terre i	
	Learning Mode:		in test of	
	Anatomy of the Breast		_	43
	Self-Breast Examination Instruction			44
	Betsi Breast Demonstration		enter	45
١.	Examines Breasts Monthly			
	1= yes, 2= no			46
١.	Thoroughness of Examination			
	1= complete 2= incomplete		1	47
	2- Incomplete			
	Detection of Lump			
	1= yes, 2= no		-	48
	a. Benign or Malignant			
	1= benign			
	2= malignant		_	49
	TEST SCORES ENTER PRE AND POST SCORES (NUMBER CO FOR EACH TYPE OF LEARNING MODE RECE!		ny acam	
	Breast Self-Examination Information Total	al Possible	2   8	50,51
		Pre		52,53
		Post		54,55
	Betsi Breast Demonstration	Pre		56
	1= passed, 2= failed	Post	V I sel	57
		rost	-	

Process Evaluation: Breast Self-Examination

ENCOUNTER #1		Card #2
	Study ID: 4	. 1
	Card Type (#): 2	2
	* 1 1 1 1	2456
1. Sponsor's last four digits of Social Security	"	3,4,5,6
2. As a result of this learning experience, did y think you had misconceptions about breast self examination?		3363000
1= yes 2= no	sleel my	7
3. Were these misconceptions adequately clarified the learning experience?	d in	8345
1= yes	unia eoi	
2= no	La Company of the Control of the Con	8
4. Rank the learning sections you received in ter of their value to you. (1= most valuable, 2=	next	
most valuable, etc.)		imminou
Anatomy of the Breast (VTR)		9
Self Breast Examination Instruction (VTR)	914.35 P.W.	10
Betsi Breast Demonstration	7,0405	11

PLEASE TURN THE PAGE

Process Evaluation: Breast Self-Examination

ENC	COUNTER #	1							Card #2
INS	STRUCTIONS	opinion. accordin	17 require Rank each g to the so nding rank	ite	m from one provided a	to nd p	five place the	(0.0	Column
F	XAMPLE:	Viewing Tim	e 1	2	3	4	5	12	
			Too Short		OK		Too Long	13	E
_									Column
5.	Viewing	Time	1 Too Short	2	3 OK	4	5	_	12
			100 Short		UK		Too Long	Ausau	
6.	Content	Interest	1	2	3	4	5		13
			Boring		OK		Fascinating	in the are	
7.	Question	s on Topic	1	2	3	4	5	_	14
			No Help		OK		Really Helped		
3.	Pace		1	2	3	4	5		15
			Too Slow		OK		Too Fast	1	
	Content	Uniqueness	1	2	3	4	5	1 1	16
			Old Stuff	1 713	OK	0)	All New		Marie 1
٥.	Content:	Value	3300 W	2	3	4	5	1	17
		,4140	No Value		3 0K		Most Valuable		
١.	Learning	Laboratory							
		an's Style	11	2	3	4	5		18
			Poor		OK		Excellent		
2.	Learning	Center	1	2	3	4	5	1	19
			Poor		OK		Excellent		
3.	Preferen	ice for							
	Instruct		1	2	3	4	5		20
			A/V Mode		Neutral		Live Teacher		
		to learn by	al						
	health w		1	2	3	4	5		21
			Less Freedom		Equa 1		More Freedom		

Process Evaluation: Breast Self-Examination

ENC	COUNTER #1							Card #2
15.	Personal responsible for learning by A/V compared to usual instruction by		Brea			or Hinds R	18	Column
	health workers	1	2	3	4	5	'	22
		Less		Equa1		More		
16.	Patient attitude toward A/V modes for health educa- tion	L De	2	aš Injaos	4	1131 <b>15</b> (100)	nan Tahan	23
		Poor		Neutral	4	Excellent		23
		1001		Neutrai		BACCITCHE	Mastil ebri	2 - Uxam
17.	Patient viewing of commercial TV in hours during the						es, 2e no Legislado otros	le ye 3. Thore
	day	1	2	3	4	5	o ra I que	24
		Less Than		Hours		More Than	151 940 400	

18. If you have any comments about the learning experience that you would like to make, please tell us. We appreciate your help and cooperation so that we can improve your experience in the learning lab.

Physical Setting:

Health Educator:

Audio-Visual Equipment:

Patient Education Programs:

Paperwork:

Patient Learning Concept:

Other:

Six Month Follow-Up Data: Breast Self-Examination

COUNTER #2			Care #3
		Study ID: 4	_ 1
	018	Card Type (#):   3	_ 2
Sponsor's last four digits of Soc	ial Security #		3,4,5,6
Examines Breasts Monthly 1= yes, 2= no			7
Thoroughness of Examination			
1= complete 2= incomplete			8
2- incomplete		eseJ -	-1 0
Detection of Lump 1= yes, 2= no		ernaman y <mark>ra s</mark>	9
<ul><li>a. Benign or Malignant</li><li>1= benign</li><li>2= malignant</li></ul>			10
Sim Month Retention Scores: (Enter Total Correct)			491.00
a. Breast Self-Examination Inform	mation		11,12
b. Betsi Breast Demonstration			
1= passed 2= failed		e argo M. trail a	_ 13
Rotter's I.E. Scale	Possible	2 3	14,15
	Actual		16,17
			1
Nelson-Denny Reading Scale	Possible	1 0 0	18,19,20

### INCLOSURE 5

0

DATA COLLECTION SHEETS

Family Planning

Demographic, Baseline Data and Test Scores: Family Planning

ENC	OUNTER #1			Card #1	
Fu1	1 Name:	Study ID:	5	1	
Add	ress:(Street)	Card Type (#):	1_1	2	•
	(City) (State) (Zip)				A
Tel	ephone Numbers: Home Work		_		
1.	Sponsor's last four digits of SSAN	Ш		3,4,5,6	
2.	Date: Month			7,8	
	Year	1_		9,10	
3.	Patient's Status			11	
4.	Sponsor's Rank/Status			12	0
5.	Sex			13	
6.	Age last birthday	L		14,15	
7.	Occupation			16	
8.	Marital Status			17	
9.	Education completed			18	
10.	Religious preference (1= Catholic, 2= Protesten	t,		19	
11.	3= Jewish, 4= None) Number of children (1= 1, 2= 2, 3= 3, 4= 4, 5=	5 or more)		20	
12.	Health Care Provider 1= M.D. 2= Nurse Clinician		-	21	*
13.	Has had prior instruction 1= yes 2= no			22	

Demographic, Baseline Data & Test Scores: Family Planning

ENCO	UNTER #1		Card	-
14.	Time of prior instruction	n: Harry Transport Process Transport Title 1975	Con	111111
		= 1-2 yrs.		
		more then 2 yrs.		
	3= 7-12 mos.	Plendra information - intal 288	23	
15.	Instructions provided by			
	1= M.D. 2= Nurse Clin		24	
		Post		
16.	Selection of Birth Contro			
	1= Vasectomy	5= Diaphram		
	2= The Rhythm Method	6= Condom		
	3= The Pill 21/28 Day	7= Other		
	4= IUD	8= None	25	
17.	The Pill:			
	a. Takes Medication as I	Directed:		
	1= yes 3= N/A		100	
	2= no 4= Don't Kno	DW L	26	
	h Vanna Antique of Duna			
	b. Knows Action of Drug 1= yes; 2= no; 3= N	1/4	27	
	1= yes ; 2= no ; 3= n	L	'	
	c. Side Effects:			
	01= Phlebitis	10= Increase in Body Hair		
	02= Break-thru Bleedin			
	03= Menstrual Changes	. Unexpected Shortness		
	04= Headaches/Double V			
	05= Weight Change	. Unusual Pain in the	1	
	06≃ Hair Loss	Chest		
	07= Vaginitis	12= Nausea/Minor Soreness		
	08= Libido Change	13= Slight Tenderness or		
	09= Spotting/Darkening	Breast Enlargement		
	of the Skin		28,2	9
18.	IUD Side Effects:			
	1= Vaginitis 3= Spot			
	2= Libido Change 4= Heav	vier Bleeding Cramping	30	
	MVDE OF LEADIN	ING MODE DECETHED		
		ING MODE RECEIVED		
	ENIER A #1 FOR	R EACH TYPE RECEIVED		
19.	Learning Mode:			
	Bearing node.			
	Introduction to Famil	ly Planning	31	
	Intra Uterine Device	- IUD	32	
	Vasectomy	nta	33	
	The Rhythm Method		34	
		1		
	The Pill - 21/28 Day		35	

Demographic, Baseline Data & Test Scores: Family Planning

ENC	OUNTER #1			Card #1
	TEST SCORE ENTER PRE AND POST SCORES (NU TYPE OF LEARNING MODE RECEIVE	MBER CORRECT) FOR EACH	orig to se	Column
20.	Family Planning Information	Total Possible	5 1 1	36,37
		Pre		38,39
	1	Post		40,41

Process Evaluation: Family Planning

H	E 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Study ID	15	1
	dest 50 Long	12.00	111111	EV : 3.7516
		Card Type (#):	2	2
. :	Sponsor's last four digits of SSAN:	Ш	1_	3,4,5,6
	As a result of this learning experience, did you think you had misconceptions about Family Planning? 1= yes, 2= no			7
1	Were these misconceptions adequately clarified in the learning experience? 1= yes, 2= no		_	8
r	Rank the learning sections you received in term of their value to you. (1= most valuable, 2= next most valuable, etc.) If you feel that mone were of value, answer none.	s	ind is	Cunter
	Introduction to Family Planning		_	9
	Intra Uterine Device - IUD			10
	Vasectomy		_	11
	The Rhythm Method			12
	The Pill		-	13
	Other Wall			14

PLEASE TURN THE PAGE

Process Evaluation: Family Planning

	according	l require a Rank each to the sca ding rank	item	from one to ovided and	o fi	ive, ace the	Card #2
EXAM	PLE: Viewing Time	1 Too Short	2	3 0K	4	5 Too Long	E
	LET 787	Care					Column
5.	Viewing Time	Too Short	2	<u>3</u> ОК	4	Too Long	16
6.	Content Interest	1 Boring	2	3 OK	4	5 Fascinating	17
7.	Questions on Topic	1 No Help	2	3 OK	4	5   Really Helped	18
		No neip	2	3	4	5	19
8.	Pace	Too Slow		OK		Too Fast	
9.	Content: Uniqueness	01d Stuff	2	OK	4	5 All New	20
0.	Content: Value	1 No Value	2	3 OK	4	5 Most Valuable	21
1.	Learning Laboratory Technician's Style		2	3	4	Las parsonhogas.	22
	recunician s Style	Poor		ок	-	Excellent	- "
2.	Learning Center	Poor	2	3 OK	4	5 Excellent	23
3.	Preference for Instruction	1	2	3	4	5	24
		A/V Mode		Neutral		Live Teacher	
4.	Freedom to learn by A/V compared to use instructions by					done	
	health workers	1	2	3	4	5	25

Process Evaluation: Family Planning

Other:

	Personal responsibi								Col
	for learning by A/V compared to usual								
	instruction by								
	health workers	1	2	3	4	5		TRUE	26
	01267	Less		Equal		More			
16.	Patient attitude toward A/V modes								
	for health educa-							1	
	tion	1	2	3	4	5			27
		Poor		Neutral		Excellent			
340	12.5								
17.									
	commercial TV in							Sale	-3
	hours during the							1	
	day	1	2	3	4	5		2.5	28
18.	If you have any comm	Less Than ments abou e tell us.	it the	Hours learning	exper:	More Than ience that help and	you w	ould	n .
18.		ments abou	. We a	learning appreciate	exper:	ience that	cooper	ould atio	n "E
18.	If you have any communities to make, please so that we can improve	ments abou	. We a	learning appreciate	exper: your e lean	ience that help and rning lab,	cooper	ould	n "E
18.	If you have any communities to make, please	ments abou	. We a	learning appreciate ence in the	exper: your e lean	ience that help and rning lab.	cooper	ould atio	n jē
18.	If you have any communities to make, please so that we can improve	ments abou	. We a	learning appreciate	exper: your e lean	ience that help and rning lab.	cooper	ould atio	n "E
18.	If you have any communities to make, please so that we can improve	ments abou	. We a	learning appreciate ence in the	exper: your e lean	ience that help and rning lab.	cooper	ould atio	n [8
18.	If you have any communities to make, please so that we can improper Physical Setting:	ments abou	. We a	learning appreciate ence in the	exper: your e lean	ience that help and rning lab,	cooper	could atio	n . E
18.	If you have any communities to make, please so that we can improphysical Setting:  Health Educator:	ments abou e tell us. ove your e	. We a	learning appreciate ence in the	exper: your e lean	ience that help and rning lab,	cooper	ould atio	n ₊ê
18.	If you have any communities to make, please so that we can improper Physical Setting:	ments abou e tell us. ove your e	. We a	learning appreciate ence in the	exper: your e lean	ience that help and rning lab,	cooper	could atio	n .e
18.	If you have any communities to make, please so that we can improphysical Setting:  Health Educator:	ments abou e tell us. ove your e	. We a	learning appreciate ence in the	exper: your e lean	ience that help and rning lab,	cooper	could atio	n .e
18.	If you have any communities to make, please so that we can improphysical Setting:  Health Educator:	ments abou e tell us. ove your e	. We a	learning appreciate ence in the	exper: your e lean	ience that help and rning lab,	cooper	could atio	n .e
18.	If you have any communities to make, please so that we can improphysical Setting:  Health Educator:	ments about the tell us. ove your e	We asserted	learning appreciate ence in the	exper: your e lean	ience that help and rning lab,	cooper	could atio	n . E
18.	If you have any communities to make, please so that we can improve the Physical Setting:  Health Educator:  Audio-Visual Equipment	ments about the tell us. ove your e	We asserted	learning appreciate ence in the	exper: your e lean	ience that help and rning lab,	cooper	could eatio	n . e
18.	If you have any commulike to make, please so that we can improve the Physical Setting:  Health Educator:  Audio-Visual Equipment Patient Education Provided the Patient Education Provided	ments about the tell us. ove your e	We asserted	learning appreciate ence in the	exper: your e lean	ience that help and rning lab,	cooper	could	n . e
18.	If you have any commulike to make, please so that we can improve the Physical Setting:  Health Educator:  Audio-Visual Equipment Patient Education Provided the Patient Education Provided	ments about the tell us. ove your e	We asserted	learning appreciate ence in the	exper: your e lear	ience that help and rning lab.	cooper	could atio	n . e
18.	If you have any commulike to make, please so that we can improve the Physical Setting:  Health Educator:  Audio-Visual Equipment Patient Education Property Paperwork:	ments about the tell us. ove your e	We accept to	learning appreciate ence in the	exper: your e lear	ience that help and rning lab.	cooper	could atio	n . E
18.	If you have any commulike to make, please so that we can improve the Physical Setting:  Health Educator:  Audio-Visual Equipment Patient Education Property Paperwork:	ments about the tell us. ove your e	We as experie	learning appreciate ence in the	exper: your e lear	ience that help and rning lab.	cooper	could atio	n . E
18.	If you have any commulike to make, please so that we can improve the Physical Setting:  Health Educator:  Audio-Visual Equipment Patient Education Property Paperwork:	ments about the tell us. ove your e	We asserted	learning appreciate ence in the	exper: your e lean	ience that help and rning lab.	cooper	could atio	n . E

Three Month Follow-Up Data: Family Planning

ENC	COUNTER #2		1	ened		Card #2
27	E 208	Emps:	e 8) 2 -1	Study ID: Card Type (#):	3	Column 1
1.	Sponsor's last four di	gits of SS	AN:	R		3,4,5,6
2.	Selection of Birth Con				Enlate	stacch
	1= Vasectomy		Diaphram		CIUD 8	
	2= Rhythm	The state of the s	Condom Other			
	3= The Pill - 21 & 28 4= IUD	8=	None			7
3.	The Pill:				SE OI	Maria B
	idal galaxasi				st but	J. 179
	a. Takes Medication a		•			-
	1= yes 3= N	on't Know			1 2000	0
	2= no 4= D	on t know				8
	b. Knows Action of Dr	ug			obs di	Fast
	l= yes	-0				
	2= ne 3= N	/A				9
					gitt V-	bheA
	c. Side Effects:					
	1= Phlebitis		11= Blood Cl			
	2= Break-thru Blee			cted Shortness	ng 201	
	3= Menstrual Chang 4= Headaches/Doubl		of Brea	l Pain in the		
	5= Weight Change	e vision	Chest	rain in the		
	6= Hair Loss			dinor Soreness		
	7= Vaginitis		The state of the s	Cenderness or		
	8= Libido Change			Enlargement	p.T. 200	
	9= Spotting/Darken the skin	ing of				
	10= Increase in Bod	y Hair				10
	IUD Side Effects:					
	1= Vaginitis		er Bleeding			
	2= Libido Changes	5= Prolo	nged Cramping	3	1	
	3= Spotting					11

Three Month Follow-Up Data: Family Planning

ENC	COUNTER #2	ERUROLIUMI		Card #3
5.	Three Month Retention Score		ш	Column 12,13
6.	Rotter's I.E. Scale	Total Possible	2 3	14,15
		Actual	Ш	16,17
7.	Nelson-Denny Reading Scale	Total Possible 1	1010	18,19,20
		Actual	11	21,22,23

INCLOSURE 6

DATA COLLECTION SHEETS

Vaginitis

0

Sa

Demographic, Baseline Data and Test Scores: Vaginitis

ENC	COUNTER #1		Card #1
Ful	1 Name	Study ID: 6	Column 1
Add	lress	Card Type	Yauld'O # 6
	(Street)	(#): 1	2
		1.89147010	0 Y202818 -1
	(City) (State) (Zip)		00 15
Tel	ephone Numbers: Home Work	end rillingsay south	to to double of
1.	Sponsor's last four digits of SSN:		3,4,5,6
2.	Date: Month	LL	7,8
	Year	zandsze o tendese. za <u>o te</u>	9,10
3.	Patient Status		11
).	Sponsor's Rank/Status	918 7 98	12
5.	Sex (TDSEMO HERRE) 223	re terri Roda trot dre a <mark>lle b</mark> en	13
6.	Age last birthday	41140030	14,15
7.	Occupation	<u> </u>	16
8.	Marital status	<u> </u>	17
9.	Education completed	L	18
10.	Health care provider		
	1= M.D. 2= Nurse Clinician		19
<b>1</b> 11.	Has had prior instruction 1= yes, 2= no		20
12.	Time of prior instruction:		
	1= less then 3 mos.		
	3= 7 to 12 mos.		21

### Demographic, Baseline Data and Test Scores: Vaginitis

ENC	OUNTER #1	TABLET LATE OF PERSONAL		Card #1
	28234	THE SAM HOUSTON, TEXAS	1	Column
13.	Instructions provided by:			
	1= M.D. 2= Nurse Clinician		carping an armin	00
	2= Nurse Clinician			22
4.	Prescribed antibiotics:			
	l= Tetracycline			ares 13
	2= Penicilin			
	3= Other			23
			epity8)	
5.				
	1= yes 2= no			
	2= no		<u> </u>	24
6.	Number of times vaginitis has !	een diagnosed:		admini sendant
	1= One			
	2= Two		שנ לכפר מוש	I alsomost a
	3= Three or more			25
7	84 S ( )			Small Larso
7.	Time laps between episodes. 1= less than 6 mos.			
	2= 6 mos to 1 yr			
	3= 1 to 2 yrs			
	4= more than 2 yrs			26
	- more than 2 / 10		E SUBSTITUTE	2
	TEST SO	CORES		
	ENTER PRE AND POST SCOR	RES ( NUMBER CORRECT )		
8.	Vaginitis Information	Total Possible	2 2	27,28
		Pre		29,30

Process Evaluation: Vaginitis

. As a rethink y  1= yes 2= no  . Were thin the  1= yes 2= no	sult of the	ur digits of is learning conceptions deceptions adexperience?	SSAN: experie about v	vaginitis	Car L d you s?	rd Type	Column 1 2 2 3,4,5,6
. As a rethink y  1= yes 2= no  . Were the in the  1= yes 2= no	sult of the	ur digits of is learning conceptions	SSAN: experie about v	vaginitis	Car L d you s?	rd Type	2 2 3,4,5,6
. As a rethink y  1= yes 2= no  . Were the in the  1= yes 2= no	sult of the	ur digits of is learning conceptions	SSAN: experie about v	vaginitis	d you		3,4,5,6
. As a rethink y  1= yes 2= no  . Were the in the  1= yes 2= no	sult of the	ur digits of is learning conceptions	SSAN: experie about v	vaginitis	d you		3,4,5,6
. As a rethink y  1= yes 2= no  . Were the in the  1= yes 2= no	sult of the	is learning conceptions	experie about v	vaginitis	s?	Jane Wales	THE RESIDENCE TO THE PROPERTY OF THE PROPERTY
1= yes 2= no 4. Were thin the 1= yes 2= no	sult of the	is learning conceptions	experie about v	vaginitis	s?	T TOO T AND TO THE TOO THE TOO TO THE TOO TO THE TOO TO THE TOO TO THE TOO THE TOO TO THE TOO THE TOO THE TOO TO THE TOO TO THE TOO T	THE RESIDENCE TO THE PROPERTY OF THE PROPERTY
think y  1= yes  2= no  . Were the in the  1= yes  2= no	ou had mis	conceptions	about v	vaginitis	s?	You's	7
1= yes 2= no 3. Were the in the 1= yes 2= no	ese miscono	ceptions ade		- E - E - E - E - E - E - E - E - E - E		A/V Mode	7
2= no . Were the in the l= yes 2= no			quately	y clarif:	ied	show was	7
Nere the in the l= yes 2= no			quately	y clarif:	ied	_	and Cod Book
in the 1= yes 2= no			quately	y clarif:	ied		amedical mode response 7/8 social isoni amedical value
2= no							all Second and the
2= no							
						1	_ 8
INSTRUCTION	opinion	4-16 require n. Rank eac ing to the s ponding rank	h item cale pr	from one rovided a	e to five	ve ce the	Example
EVAMPIE . U	ewing Time	1	2	3	4	5 .	
DANIE DE . VI	CATHE TIME	Too Short		OK		oo Long	E
							AND STORAGE
-							Column
. Viewing	Time	1	2	3	4	5	
		Too Short		OK	To	oo Long	_ 9
			2	3	4	5 .	ar House
. Content	Interest	1	4				
	Interest	Boring		ок	Fas	scinating	_   10
5. Content Questio		Boring	2		Fas	scinating	_ 10

PLEASE TURN THE PAGE

Process Evaluation: Vaginitis

ENC	OUNTER #1	RZBA		SEASI , MG	LEATE.	n n 40 - 111 W4	Card #2
							Column
	Pace	1 8111	2	3	4	VA NE 5 20 5	
		Too Slow		OK		Too Fast	12
	Content Uniqueness	1	2	3	4	5	
. '	ourcent ourdreness	Old Stuff	-	OK	-	All New	13
				J.K			
9. (	Content Value	9571 516	2	3	4	51	
		No Value		OK		Most Valuable	14
	Learning Lab						
0.	Technicians Style	1	2	OK	4	5	
		Poor		OK		Excellent	15
1. 1	Learning Center	1	2	3	4	5	
		Poor	-	OK	7 10	Excellent	16
1	Preference for						
2. 1	Instruction	1	2	3 Neutral	4	5 .	
		A/V Mode		Neutral		Live Teacher	17
	Freedom to learn					alpaba and tigamoral	
	by A/V compared					ing experience?	
	to usual instruc-						
	tions by health		_				
	vorkers	1	2	3	4	More Freedom	18
		Less Freedom		Equa1		more rreedom I	10
						REPORT OF THE PROPERTY OF	
	Personal responsi-					E orroper 31-4 smer	
	oilities for learni	Ing				1 done week .cotyb	
	by A/V compared to					lace sit of galero.	
	sual instruction	961 07 00		a spiratorn	90,1	nt Knar shibmegeart	
b	y health workers	1	2	3	4	<u>5</u>	10
		Less		Equa 1		More	19
. F	Patient attitude					Tanks one	
	oward A/V modes						
	or health duca-						
			2	3	4	5	
f	ion	1	4				
f		Poor		Neutral		Excellent	20
f				Neutral		Excellent	20
f t	cion  Patient viewing of		2	Neutra1		Excellent	20
f t	cion  Patient viewing of commercial TV in		2	Neutra1		Excellent	20
f t	cion  Patient viewing of		A A	Neutral		Excellent	20
f t	cion  Patient viewing of commercial TV in	Poor	4	Neutral  3  Hours	4	Excellent5	20

17. If you have any comments about the learning experience that you would like to make, please tell us. Areas of specific interest are as follows:

Process Evaluation: Vaginitis Card #2\_ ENCOUNTER #1 Physical Setting: Health Educator: Audio-Visual Equipment: Patient Education Programs: Paperwork:

Other:

72

Patient Learning Concept:

Six Month Follow-up Data: Vaginitis

ENC	OUNTER #2				Card #3
			Study ID: Card Type (#):	3	Column 1
1.	Sponsor's last four digits of SS	SAN:			3,4,5,6
2.	Reoccurence of vaginitis in the 1= yes 2= no	past 6 mos.	1 January	L Equit	7
	a. If yes, when: 1= 1 mo. 3= 3 mos. 2= 2 mos. 4= 4-6 mos.			DE FROM	8
3.	Six Month Retention Scores: (Enter Total Correct)				
	a. Vaginitis Information	Total Possible	L	2   2	9,10
		Actual Score	L	1	11,12
4.	Rotter's I.E. Scale	Total Possible	نا	2 3	13,14
		Actual Score	L	1	15,16
5.	Nelson-Denny Reading Scale	Total Possible	1110	010	17,18,19
		Actual Score	LL		20,21,22

#### INCLOSURE 7

DATA COLLECTION SHEETS

Child Growth and Development

1

#### Demographic, Baseline Data and Test Scores: Child Growth and Development

ENC	COUNTER #1	EMB	Card #1	
NAN	1E	Study ID: 8	Column 1	
ADI	ORESS THE THE PROPERTY OF THE	Card Type (#): 1	2	J
Tel	ephone Numbers: Home Work			
1.	Sponsor's last four digits of SSN		3,4,5,6	
2.	Date: Month		7,8	
	Year		9,10	
3.	Patient Status	<u> </u>	11	
4.	Sponsor's Rank/Status	L_	12	
5.	Sex	<u> </u>	13	
6.	Age last birthday		14,15	
7.	Occupation		16	
8.	Marital status	L	17	
9.	Education completed	L_	18	0
10.	Health care provider (1= M.D., 2= N.C.)		19	
11.	Has had prior instruction (1= yes, 2= no)		20	1
12.	Time of prior instruction:  1= less than 3 mos. 4= 1-2 yrs.  2= 4-6 mos. 5= more than 2 yrs.			
	3= 7=12 mos.		21	

#### Demographic, Baseline Data and Test Scores: Child Growth & Development

	UNTER #1			Card #1
13.	Instructions provided by:			COLUMN
	1= M.D.			
	2= N.C.			22
14.	Number of children (Actual number)		<u></u>	23
	TEST SCORES			
	ENTER PRE AND POST SCORES (NUMBER C	ORRECT)		
5.	Child Growth & Development Information			
	Birth to Year One	TOTAL POSSIBLE	2 3	24,25
		Pre		26,27
		Post		28,29
	Child Growth & Development Information		faminot	
	Year One to Year Two	TOTAL POSSIBLE	1 8	30,31
		Pre		32,33
		Post		34,35
	Child Growth & Development Information			
	Year Two to Year Three	TOTAL POSSIBLE	9	36
		Pre		37
		Post		38
	COMPOSITE SCORE	TOTAL POSSIBLE	5 0	39,40
		Pre		41,42
		Post	on Touch	43,44

Process Evaluation: Child Growth and Development

	OUNTER #1						Card #2	
							Column	
					Study ID:	_   _ 8	1	
	1				Carl Tare		a .	
					Card Type (#):	1 2	2	
					(11):	1_2	of an les	
					nd desir			
1.	Sponsor's last fou	r digits of	SSAN:			1	3,4,5,6	
2.	As a result of thi think you had misc and Development?						5.03.00	
	.10100 1 1 1 1							
	1= yes 2= no					1	7	
	2= no						,	
٥.	Were these miscond in the learning ex	mperience?	180	y Clarifi			KCH0	
	1 ,00							
	2= no			es est m			8 Example	
INS	TRUCTIONS: Items 4 opinion accordi corresp	-16 require . Rank eac	a resp	oonse ref from one	lecting your	nove en		
INS	TRUCTIONS: Items 4 opinion accordi	-16 require . Rank eac	a resp	oonse ref from one	lecting your to five nd place the	noos en		
	TRUCTIONS: Items 4 opinion accordi corresp	-16 require . Rank eac	a resp	oonse ref from one	lecting your to five nd place the	1004 27		
	TRUCTIONS: Items 4 opinion accordi correspright.	-16 require Rank eaching to the so	a resp h item cale pr in the	oonse ref from one covided a coding	lecting your to five nd place the column to the	18008 27		
	TRUCTIONS: Items 4 opinion accordi correspright.	-16 require Rank eaching to the so	a resp h item cale pr in the	conse ref from one covided a coding	lecting your to five nd place the column to the	10004 27	Example	
	TRUCTIONS: Items 4 opinion accordi correspright.	-16 require Rank eaching to the so	a resp h item cale pr in the	conse ref from one covided a coding	lecting your to five nd place the column to the	1004 27	Example	
EXA	TRUCTIONS: Items 4 opinion accordi corresp right.  MPLE: Viewing Time	-16 require Rank eacing to the so conding rank	a resp h item cale pr in the	oonse ref from one covided a coding	lecting your to five nd place the column to the	10004 27	Example	
EXA	TRUCTIONS: Items 4 opinion accordi correspright.	-16 require Rank eacing to the so conding rank	a resp h item cale pr in the	conse ref from one covided a coding	lecting your to five nd place the column to the		Example	
	TRUCTIONS: Items 4 opinion accordi corresp right.  MPLE: Viewing Time	-16 require Rank eaching to the solution rank  Too Short	a resp h item cale pr in the	oonse ref from one covided a coding	lecting your to five nd place the column to the  4 5 Too Long		Example	
EXA	TRUCTIONS: Items 4 opinion accordi corresp right.  MPLE: Viewing Time	-16 require Rank eaching to the solution rank  Too Short	a resp h item cale pr in the	oonse ref from one covided a coding	lecting your to five nd place the column to the  4 5 Too Long  4 5 Too Long		Example  E  Column	
EXA	TRUCTIONS: Items 4 opinion accordi corresp right.  MPLE: Viewing Time  Viewing Time	1 Too Short	a resp h item cale pr in the	oonse ref from one covided a coding	lecting your to five nd place the column to the  4 5 Too Long		Example	
EXA 4.	TRUCTIONS: Items 4 opinion accordi corresp right.  MPLE: Viewing Time  Viewing Time  Content Interest	1 Too Short	a resp h item cale pr in the	oonse ref from one covided a coding	lecting your to five nd place the column to the  4 5 Too Long  4 5 Too Long		Example  E  Column	
EXA	TRUCTIONS: Items 4 opinion accordi corresp right.  MPLE: Viewing Time  Viewing Time  Content Interest  Questions on	1 Too Short	a resp h item cale pr in the	oonse ref from one rovided a coding 3 OK 3 OK	lecting your to five nd place the column to the  4 5 Too Long  4 5 Too Long		Example  E  Column	
EXA 4.	TRUCTIONS: Items 4 opinion accordi corresp right.  MPLE: Viewing Time  Viewing Time  Content Interest	1 Too Short	a resp h item cale pr in the	oonse ref from one covided a coding	lecting your to five nd place the column to the  4 5 Too Long  4 5 Too Long		Example  E  Column	

PLEASE TURN THE PAGE

Process Evaluation: Child Growth and Development

ENCOUNTER #1	,					Card #2
						Column
. Pace	Too Slow	-2	OK	4	Too Fast	12
	100 210W		OK		100 rast	12
B. Content Uniquene		2	3	4	5	
	Old Stuff		OK		All New	13
9. Content Value	1	2	3	4	5 .	
	No Value		OK		Most Valuable	14
Learning Lab		2	3		1 232 24, 3079	F THE PERSON
). Technicians Styl	Poor		OK	-4	Excellent	15
1. Learning Center	1	2	3	4	5	16
Preference for	Poor		OK		Excellent	16
2. Instruction	1	2	3	4	5	
	A/V Mode		Neutral		Live Teacher	17
. Freedom to learn						
by A/V compared	.*					
to usual instruc	-				reserved and receive	Pathone
tions by health		•	•			
workers	Less	2	3 Equal	4	More Freedom	18
	Freedom		-4			
						Control (A
<ul> <li>Personal respons bilities for lear</li> </ul>						
by A/V compared						
usual instruction						
by health worker	s <u>l</u> Less	2	3 Equal	4	More	19
	ress		Eduat		More	making.
. Patient attitude						
toward A/V modes						
for health educa-	1	2	3	4	5	
	Poor	-	Neutral		Excellent	20
						. ensetau
commercial TV in						
hours during the						
day	1	2	3	4	5	
	Less Than		Hours		More Than	21

17. If you have any comments about the learning experience that you would like to make, please tell us. Areas of specific interest are as follows:

Process Evaluation: Child Growth and Development

	11					Card #2
						7. 94.00
Physica	al Setting:					
						S. (manual Paleon) .5
Health	Educator:					
3,6	Joed Loux?		. 310			
Aud10-V	isual Equipment:					
						12. Instruction
Patient	Education Progra	ams:				
Paperwo	rk:					
				:		
9.5	Hell					
Patient	Learning Concep	t:		2		
Patient	Learning Concep	t:		2		
	Learning Concept	t:		¥ 2	Total	
Patient Other:		t:		: 2	E cons	

Six Month Follow-up Data: Child Growth and Development

ENC	COUNT	ER #2		Card #3
			Study ID: 8	Column 1
			Card Type (#): 3	2
1.	Spo	nsor's last four digits of S	SN:	3,4,5,6
2.		month retention scores: er Total Correct)		
	a.	Child Growth & Development: Birth to Year One	TOTAL POSSIBLE 2 3	4,5
			Actual Score	6,7
	ь.	Child Growth & Development: Year One to Year Two	TOTAL POSSIBLE 1 8	8,9
			Actual Score	10,11
	c.	Child Growth & Development: Year Two to Year Three	TOTAL POSSIBLE 9	12
			Actual Score	13
3.	Rot	ter's I.E. Scale	TOTAL POSSIBLE 2 3	14,15
			Actual Score	16,17
4.	Nel Sca	son-Denny Reading le Actual	Score	18,19,20

### INCLOSURE 8

DATA COLLECTION SHEETS

Low Back Pain state great sent at senance

61

Demographic, Baseline Data and Test Scores: Low Back Pain

ENCOUNTER #1	Card #1
Name	Study ID: 7 Column
Address	Card Type
(Street)	(#): 1 2
	Form the second
(City) (State) (2	Zip)
Telephone Numbers: Home Wor	-k
1. Sponsor's last four digits of SSN:	3,4,5,6
2. Date: Month	7,8
Year	9,10
3. Patient Status	
Sponsor's Rank/Status	12
5. Sex	13
6. Age last birthday	14,15
7. Occupation	16
8. Marital status	
9. Education completed	18
10. Health care provider 1- M.D.	
2= Nurse Clinician 3= Physical Therapist	l 19
11. Has had prior instruction l= yes, 2= n	20
12. Time of prior instruction:	•
1= less then 3 mos. 4= 1 to 2 yrs. 2= 4 to 6 mos. 5= more then 2 y	rs.
3= 7 to 12 mos.	21

### Demographic, Baseline Data & Test Scores: Low Back Pain

ENCO	UNTER #1	is herean so thences .		Card #1
13.	Instructions provided by: 1= M.D. 2= Nurse Clinician 3= Physical Therapist	Beseline Days and less	Demographics	Column 22
14.	History of low back pain 1= yes 2= no	(de rai	· · · · · · · · · · · · · · · · · · ·	23
15.	How did the low back pain start 1= Trauma (i.e., lifting incorre 2= Long Trip 3= Other		(vals)	24
	TEST SCE			L Sponsor!
16.	Low Back Pain Information	Total Possible	115	25,26
	31,6	Pré	7 38	27,28
	п	Post	311363	29,30
17.	Correct Posture Demonstration 1=Pass		Nank/Stacus	assands C
	2=Fail		<u> </u>	31

Process Evaluation: Low Back Pain

					Card #2
			Study ID:	<u>_7</u>	Column 1
			Card Type (#):	_2	2
. Sponsor's last fo	ur digits of SSA	N:		工	3,4,5,6
. As a result of the				my track of	
1= yes 2= no				pert	7
. Were these miscon in the learning e		ely clarified		tana ngan	
1					
1= yes 2= no			1000		8
2= no  INSTRUCTIONS: Items opinio accord	4-16 require a ren. Rank each ite ing to the scale ponding rank in t	em from one to provided and	five place the	incentra at tot tachquo tach cus which in	8 Example
2= no  INSTRUCTIONS: Items opinio accord corres right.	n. Rank each ite ing to the scale ponding rank in	em from one to provided and the coding col	five place the		
2= no  INSTRUCTIONS: Items opinio accord corres right.	n. Rank each ite ing to the scale ponding rank in	em from one to provided and the coding col	five place the lumn to the		Example E
2= no  INSTRUCTIONS: Items opinio accord corres right.	n. Rank each ite ing to the scale ponding rank in  1 2 Too Short	em from one to provided and the coding colons OK	five place the lumn to the		Example  E  Column
2= no  INSTRUCTIONS: Items opinio accord corres right.  EXAMPLE: Viewing Time	n. Rank each ite ing to the scale ponding rank in  1 2 Too Short  1 2 Too Short	em from one to provided and the coding colons OK	five place the lumn to the Too Long		Example E
2= no  INSTRUCTIONS: Items opinio accord corres right.  EXAMPLE: Viewing Time	n. Rank each ite ing to the scale ponding rank in  1 2 Too Short  1 2 Too Short	em from one to provided and the coding colors OK	five place the lumn to the 5 Too Long Too Long		Example  E  Column  9
2= no  INSTRUCTIONS: Items opinio accord corres right.  EXAMPLE: Viewing Time	n. Rank each ite ing to the scale ponding rank in  1 2 Too Short  1 2 Too Short	em from one to provided and the coding colons OK	five place the lumn to the 5 Too Long	8	Example  E  Column

PLEASE TURN THE PAGE

Process Evaluation: Low Back Pain

EN	COUNTER #1	45,025,00	-	AND THE REAL PROPERTY.	16.3	Property and the second	Card #2
							Column
7.	Pace	Too Slow	.2	OK .	4	Too Fast	1.0
		100 210M		UK .		100 Fast	12
8.	Content Uniqueness	1	2	3	4	5	THUNKTOOK
-	doubles outdouble	Old Stuff		OK		All New	13
9.	Content Value	1	2	3	4	5	
	9 12 12	No Value		OK		Most Valuable	14
10	Learning Lab Technicians Style		2	3	4	•	
10.	rechnicians style	Poor		OK	-	Excellent	15
				0.0			acendo vicin
11.	Learning Center	1	2	3	4	5	
		Poor		OK	in h	Excellent	16
	Preference for						
12.	Instruction	1		Neutral	4	Live Teacher	17
		A/V Mode		Neutral		Live reacher	24.46
13.	Freedom to learn	. 60					
	by A/V compared						milit no
	to usual instruc-						
	tions by health				,		AUR ME
	workers	Toos	2	3 Equal	4	More Freedom	18
		Less Freedom		Tanba		More Preedom	10
14.	Personal responsi-						*
	bilities for learn:						AL STORESONA
	by A/V compared to						
	usual instruction	t or replice	2	3		er getherensen	
	by health workers	Less		Equal	-	More	19
		Dess		Dquar			
15.	Patient attitude						RA :STAWAYS
	toward A/V modes						d
	for health educa-						
	tion	1	2	3	4	5 Pres 211 and 1	20
		Poor		Neutral		Excellent	20
16.	Patient viewing of						9
	commercial TV in						
	hours during the						THE RESIDENCE AND THE
	day	Less Than	2	3 Hours	4	More Than	21

17. If you have any comments about the learning experience that you would like to make, please tell us. Areas of specific interest are as follows:

Other:

A SERVICE LATOR DECEMBER OF TOTAL POST OF

One Month Follow-Up Data: Low Back Pain

ENCOUNTER #2			Card #3
•	Study	ID: 7	Column 1
		trassout	Health B
	Card	Type (#): 3	2
. Sponsor's last four digits of	SSAN	-1-1-	3,4,5,6
<ul> <li>Has the patient maintained an program? (Check for: improved</li> </ul>	posture, correct	Barrig Cripal - 2 Barri	av-ounter
	position, and		
2- no proper m	method of reaching)	-	7
. Is the patient experiencing an	y discomfort?	ducarten Fr	Jan 151
1= yes 2= no		1	8
2 10		1	
a. If yes, describe the disco	mfort:		
1- constant		:	
2- intermittent			9
b. What activity is this disc	omfort associated		
with?			
1= lifting 4= standi			
2= auto trips 5= more t 3= walking 6= other	han one of the above	1	10
. One Month Retention Scores:			
(Enter total correct)			
a. Low Back Pain Information	TOTAL POSSIBLE	115	11,12
	Actual Score		13,14
<ul><li>b. Correct Posture Demonstrat</li><li>1= Pass</li></ul>	ion		
2= Fail			15
. Rotter's I.E. Scale	TOTAL POSSIBLE	12 1 3	16,17
	Actual Score		18,19
		1 1	
. Nelson-Denny Reading Scale	ACTUAL LEVEL		20,21,22

#### GLOSSARY OF TERMS

- 1. ACCOUNTABILITY: The product of a process. At its most basic level it means that an agent, public or private, entering into a contractual agreement to perform a service, will be held answerable for performing according to agreed upon terms, within an established time period, and with a stipulated use of resources and performance standards.
- 2. ACTIVITY: The actual performance of steps in an operation, job, task, or function, specified in measurable performance (behavioral) terms.
- 3. ACTIVITY ANALYSIS: The technique of reducing or breaking down defined functions (jobs or tasks) into specific actions or activities that are performed in the completion of the job or task (sequence or procedure).
- 4. ADJUSTMENT (System): System is modified so that its output is more closely in line with preset performance levels; also makes the system more efficient and effective.
- 5. <u>COMPONENTS</u>: Units of a system which perform specific functions in assisting in the overall accomplishment of the system goals.
- 6. CONSTRAINTS (Inhibitors): Known or predicted conditions which will restrict or in some way limit the development, implementation, and operation of a system. These may be prespecified or derived through the systems analysis process. The system is designed to eliminate, overcome or reconcile, or work within or around constraints in order to accomplish the mission objective.
- 7. CRITERION TEST: An examination used to evaluate the attainment of each instructional objective and to validate the course of study. Used also as a design document.
- 8. DESIGN: The technique for specifying material requirements and/or performance standards for constructing an operating part of component specifications that are compatible with defined functions to be performed for stated parts of the system.
- 9. EDUCATIONAL TECHNOLOGY: The application of science-based or science-derived concepts and techniques in a systematic way to the practical task of education.
- 10. EVALUATION: Establishing the correctness of system objectives when measured against required performances in the real environment substantiating that the system objectives, as designed, are appropriate for accomplishing required performances once objectives have been met.
- 11. FEEDBACK: Information which is used to evaluate a component's or system's performance.
- 12. INDIVIDUAL INSTRUCTION: Planning and conducting with each student a program of studies that is tailored to his/her learning needs and his/her characteristics as a learner.

- 13. INSTRUCTION: The process of providing the learning environments and management necessary to cause a learner to meet his/her prespecified objectives.
- 14. INSTRUCTIONAL CBJECTIVE: The type of behavior the instruction is to generate; constraints or conditions under which the behavior is to occur; and the performance level at which the behavior is to occur. When appropriate, time limitations are included as well.
- 15. INSTRUCTIONAL SYSTEM: The combination of all the components of a system in such a way that they contribute to the overall accomplishment of the stated objectives of the system. Each component contributes individually, and as an integral part of the system.
- 16. <u>ITERATION</u>: The process of continuous and repeated evaluation of each analysis step with prior analysis steps and stated mission objectives, in order to insure the progressive development of valid system functional requirements and compatible design requirements and criteria for achieving stated system functions.
- 17. <u>LEARNER-CENTERED</u>: Objectives of the system stated in terms of learner outcomes; all components as well as the overall system "mission" being deduced to the accomplishment of the outcomes by the learner.
- 18. <u>LEARNING SYSTEMS DESIGN</u>: The process of educational technology applied to all elements involved in the design of learning systems.
- 19. MASTERY: Performance of behavior at (or higher than) a predetermined level; indicates that achievement of learning has occurred at the desired level.
- 20. MEDIA: Any and all physical means (including speech or print) used for communication between a message sender and message receiver.
- 21. METHOD/MEDIA ANALYSIS: The process employed in curriculum design for selecting the most efficient method/media combinations by which a student can achieve the desired learning outcomes. Analysis is performed on the stated task of the student to determine stimulus-response requirements and the criticality and difficulty of the learning task. Alternate method/media combinations are proposed for optimum achievement of each learning task. Alternate method/media combinations are proposed for optimum achievement of each learning task and objective against the analyzed requirements of the learner's tasks.
- 22. MODEL: A representation of the system under study; one model may be a physical replica of the system; another such as one used in a digital computer simulation, may be an entirely symbolic representation.
- 23. PERFORMANCE STANDARDS: The minimum standards a person must meet to perform a task satisfactorily. Examples of standards are; time limitations, accuracy, completeness, economy.

- 24. QUALITY CONTROL: The monitoring of a system and its planned change by which adjustments are introduced to correct the differences between actual output performance and performance expectations established by objectives.
- 25. SYSTEM: An assemblage of elements which operate through interaction and independently to achieve some common goal or outcome.
- 26. SYSTEMS APPROACH: Formal methodology in which an educational need is first established, instructional objectives are designed, patient characteristics are evaluated, the specific design of the educational system is accomplished, testing revision and validation of the system is completed, and a general set of instructions for the management of the system is achieved.
- 27. <u>VALIDATION INSTRUCTION</u>: Instruction that does in fact accomplish that for which it was designed; that causes the learner to demonstrate the performances at mastery level consistently.
- 28. <u>VALIDATION</u>: The process of successively improving an educational system to a predetermined standard of performance or behavior by evaluating learner progress against the stated instructional objectives.

#### LIST OF ABBREVIATIONS, ACRONYMS, AND SYMBOLS

- 1. AHS: Academy of Health Sciences
- 2. AMEDD: Army Medical Department
- 3. A/V: Audio-Visual
- 4. FSHTX: Fort Sam Houston, Texas
- 5. HCSD: Health Care Studies Division
- 6. HSC: Health Services Command
- 7. ISD: Instructional Systems Design
- 8. MEDDAC: Army Medical Activity
- 9. PACOMED: Patient and Community Health Education Model: A Developmental and Evaluation Project Study

#### 11. DISTRIBUTION:

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